

QK370  
.F55

v. 8  
pt. 1

# FLORA MALESIANA

SERIES I - SPERMATOPHYTA

*Flowering Plants*

Vol. 8, part 1

*Cyclopaedia of Collectors - Supplement 2*  
*Hypericaceae*

# INDEX TO REVISED FAMILIES

Aceraceae . . . . .	4: 3, 592	Dipsacaceae . . . . .	4: 290	Passifloraceae . . . . .	7: 405
Actinidiaceae s. str. . . . .	4: 37	Droseraceae . . . . .	4: 377; 5: 557	Pedaliaceae . . . . .	4: 216
Aizoaceae . . . . .	4: 267	Elatinaceae . . . . .	4: 203	Pentaphragmataceae . . . . .	4: 517
Alismataceae . . . . .	5: 317; 6: 915	Epacridaceae . . . . .	6: 422	Pentaphragmataceae . . . . .	5: 121
Amaranthaceae . . . . .	4: 69, 593; 6: 915	Ericaceae . . . . .	6: 469, 943	Philydraceae . . . . .	4: 5
Ancistrocladaceae . . . . .	4: 8	Erythroxylaceae . . . . .	5: 543	Phytolaccaceae . . . . .	4: 229
Aponogetonaceae . . . . .	4: 11; 7: 213	Fagaceae . . . . .	7: 265	Pittosporaceae . . . . .	5: 345
Basellaceae . . . . .	5: 300	Ficoidaceae . . . . .	4: 267	Plumbaginaceae . . . . .	4: 107
Batidaceae . . . . .	5: 414	Flacourtiaceae . . . . .	5: 1, 565; 6: 943	Podostemaceae . . . . .	4: 65; 6: 963
Betulaceae . . . . .	5: 207; 6: 917	Flagellariaceae . . . . .	4: 245	Polemoniaceae . . . . .	4: 195
Bixaceae s. str. . . . .	4: 239	Geraniaceae . . . . .	6: 445	Pontederiaceae . . . . .	4: 255
Burmanniaceae . . . . .	4: 13, 592	Gnetaceae . . . . .	4: 336; 6: 944	Portulacaceae . . . . .	7: 121
Burseraceae . . . . .	5: 209, 567; 6: 917	Gonystylaceae . . . . .	4: 349	Primulaceae . . . . .	6: 173
Butomaceae . . . . .	5: 118	Goodeniaceae . . . . .	5: 335, 567; 6: 949	Proteaceae . . . . .	5: 147
Byblidaceae . . . . .	7: 135	Haemodoraceae . . . . .	5: 111	Punicaceae . . . . .	4: 226
Callitrichaceae . . . . .	4: 251	Haloragaceae . . . . .	7: 239	Restionaceae . . . . .	5: 416
Campanulaceae . . . . .	6: 107, 928	Hamamelidaceae . . . . .	5: 363	Rhizophoraceae . . . . .	5: 429; 6: 965
Cannabinaceae . . . . .	4: 223	Hippocrateaceae . . . . .	6: 389	Salicaceae . . . . .	5: 107
Capparidaceae . . . . .	6: 61	Hydrocaryaceae . . . . .	4: 43	Salvadoraceae . . . . .	4: 225
Caprifoliaceae . . . . .	4: 175, 598; 6: 928	Hydrocharitaceae . . . . .	5: 381; 6: 952	Sarcospermaceae . . . . .	4: 32
Cardiopteridaceae . . . . .	7: 93	Hydrophyllaceae . . . . .	4: 207	Saururaceae . . . . .	4: 47
Celastraceae . . . . .	6: 227, 389, 930	Hypericaceae . . . . .	8: 1	Scyphostegiaceae . . . . .	5: 297; 6: 967
Centrolepidaceae . . . . .	5: 421	Icacinaeae . . . . .	7: 1	Simaroubaceae . . . . .	6: 193, 968
Ceratophyllaceae . . . . .	4: 41	Juglandaceae . . . . .	6: 143	Sonneratiaceae . . . . .	4: 280, 513; 6: 973
Chenopodiaceae . . . . .	4: 99, 594; 6: 932	Juncaceae . . . . .	4: 210	Sparganiaceae . . . . .	4: 233
Clethraceae . . . . .	7: 139	Juncaginaceae . . . . .	4: 57	Sphenocleaceae . . . . .	4: 27
Cochlospermaceae . . . . .	4: 61	Lemnaceae . . . . .	7: 219	Stackhousiaceae . . . . .	4: 35
Combretaceae . . . . .	4: 533; 5: 564; 6: 932	Loganiaceae . . . . .	6: 293, 953	Staphyleaceae . . . . .	6: 49
Connaraceae . . . . .	5: 495; 6: 933	Lophopyxidaceae . . . . .	7: 89	Stylidiaceae . . . . .	4: 529
Convolvulaceae . . . . .	4: 338, 599; 5: 558; 6: 936	Malpighiaceae . . . . .	5: 125	Styracaceae . . . . .	4: 49
Corynocarpaceae . . . . .	4: 262; 5: 557	Martyniaceae . . . . .	4: 216	Thymelaeaceae . . . . .	4: 349; 6: 1, 976
Crassulaceae . . . . .	4: 197	Molluginaceae . . . . .	4: 267	Trapaceae . . . . .	4: 43
Cyperaceae . . . . .	7: 435	Moringaceae . . . . .	4: 45	Trigoniaceae . . . . .	4: 59
Datisaceae . . . . .	4: 382	Myoporaceae . . . . .	4: 265	Turneraceae . . . . .	4: 235
Dichapetalaceae . . . . .	5: 305; 6: 941	Myricaceae . . . . .	4: 277	Typhaceae . . . . .	4: 243
Dilleniaceae . . . . .	4: 141	Najadaceae . . . . .	6: 157	Umbelliferae . . . . .	4: 113, 595; 5: 555; 6: 983
Dioscoreaceae . . . . .	4: 293	Nyctaginaceae . . . . .	6: 450	Valerianaceae . . . . .	4: 253
		Ochnaceae . . . . .	7: 97	Violaceae . . . . .	7: 179
		Oxalidaceae . . . . .	7: 151	Xyridaceae . . . . .	4: 366, 598
		Papaveraceae . . . . .	5: 114	Zygophyllaceae . . . . .	4: 64

MALESIAN PLANT  
COLLECTORS AND COLLECTIONS

**SUPPLEMENT II**

*BY*

M. J. VAN STEENIS-KRUSEMAN

# GENERAL PART



## PREFACE

In this 2nd and final supplement (to Cycl. in Fl. Mal. I, 1, 1950 and Suppl. I in Fl. Mal. I, 5, 1958, p. ccxxxvii-cccxlii) relatively little space is occupied by collectors of former centuries as only few additional data could be unearthed. Recent collectors are included as far as known to me, but several did not answer my queries and their entries will be very incomplete.

Contemporary collectors generally pay more attention to the numbering and labelling, and taxonomists will not have much difficulty in locating their finds. This is one of the reasons that I have decided to close with this second supplement. I expect that the chapters 'Obituaries and Biographical Notes' and 'Expeditions and Explorations' in Flora Malesiana Bulletin will be continued, and will give ample information for those interested.

June 1973

M. J. van Steenis-Kruseman.



## CHAPTER I. INTRODUCTION

### h. ERRONEOUSLY LOCALIZED PLANTS AS SOURCES OF ERRORS, AND HOW TO CORRECT THESE

#### 6. Malesian botanical collections in which errors occur.

Cyclopaedia p. xxiii-xxix add:

F. de Lahaie, see C. A. G. RICHE.

C. A. G. Riche and F. de Lahaie, naturalists of the voyage in 'La Recherche' and 'L'Espérance' in search of La Pérouse, 1791-1794, collected in Mauritius and Réunion. Part of the plants have erroneously been labelled 'Java'.

### i. LIST OF WORKS PRINCIPALLY CONTAINING ILLUSTRATIONS OF MALESIAN PLANTS, AND OF COLLECTIONS OF DRAWINGS AND PHOTOGRAPHS

Cyclopaedia p. xxx-xxxi, §1, add:

ARCHER, MILDRED, *Natural History Drawings in the India Office Library*. London 1962.

Of the numerous collections of drawings several of the botanical ones were removed to Kew and the British Museum. The remaining collections are listed in a Catalogue (p. 71-102). The book contains a host of information on the plates, their collectors, painters, etc.

BACKER, C. A., *Onkruidflora der Javasche suikerrietgronden*. Add: The final instalment of the atlas, containing 220 plates, was published in May 1973.

*Register of Photographs* (?1971) in the Collection of the Forest Department, Sarawak, Malaysia.

This stencilled register has been distributed; the collection was started in 1963.

Cyclopaedia p. xxxi-xxxiii, §2, add:

REINWARDT, C. G. C. At the end of the entry add: A collection of PAYEN's non-botanical drawings is in the Ethnographical Museum Leyden.

ROWAN, ELLIS. A number of *drawings from E. New Guinea*. See: H. J. SAMUEL, *The Story of Ellis Rowan*. London, Constable & Co., 1961, 151 pp., ill.

SURBECK. Miss H. E. SURBECK, zum Brunquell, Hallau (Schaffhausen), Switzerland, has some 200 water colour *drawings of Sumatran plants* made obviously by her father, H. SURBECK, who also collected plants.

### j. ANNOTATED LIST OF LITERATURE FOR THE USE OF BOTANISTS AND EXPLORERS IN MALESIA<sup>1</sup>

Cyclopaedia p. xxxv add to:

#### Weed Floras

(2) Add: The unpublished 220 plates of this Flora, which were still preserved at the Pasuruan Sugarcane Experiment Station, were published in May 1973.

Cyclopaedia p. xxxvi-xxxvii:

#### Flora of the Malay Peninsula

Add:

(7) HENDERSON, M. R., *Malayan Wild Flowers* (Dicotyledons pts 1-3 in Mal. Nat. J. 1949-51; Monocotyledons publ. by the Mal. Nature Soc., Kuala Lumpur 1954).

(8) GILLILAND, H. B., *Common Malayan Plants*. Singapore 1958. Selected drawings with notes.

(9) HENDERSON, M. R., *Common Malayan Wildflowers*. Longmans London 1961 (in series *Malayan Nature Handbooks*).

(10) GILLILAND, H. B., *A revised Flora of Malaya*. III. *Grasses of Malaya*. 1971.

(11) *Tree Flora of Malaya*. 1st vol. 1972.

For the ferns see under 'Pteridophyta'.

Cyclopaedia p. xxxvii-xxxviii:

#### Flora of Java

(10) Add: The final instalment of the atlas, containing 220 plates, was published in May 1973. Add:

(14) BACKER†, C. A. & R. C. BAKHUIZEN VAN DEN BRINK JR., *Flora of Java* (Spermatophytes only). Groningen 1963-1968, 3 vols. With a concise plant-geography of Java by C. G. G. J. VAN STEENIS & Mrs. A. F. SCHIPPERS-LAMMERTSE in vol. 2 (1965) p. (1)-(72), with photogr. and 2 maps.

(15) STEENIS, C. G. G. J. VAN, *The Mountain Flora of Java*. Leiden 1972. With 20 introductory chapters elucidating all involved aspects, 57 coloured (originally hand-drawn) plates depicting

(1) No attempt is made to make exhaustive additions, as these can be found in the *Flora Malesiana Bulletin*.

456 species with extensive captions on features not seen on the plates, as size of the total plant, habitat, occurrence elsewhere, etc. 72 Photographs are reproduced to give an impression of the habitats and vegetation types.

Cyclopaedia p. xxxviii-xxxix:

#### Flora of Borneo

(6) Add: Continued in Reports Sarawak Museum 1924-34.

Add:

(20) MERRILL, E. D., *A brief survey of the present status of Bornean Botany* (Webbia 12, 1950, p. 309-324).

(21) BROWNE, F. G., *Forest Trees of Sarawak and Brunei and their Products*. Kuching, Sarawak 1955, 369 + xviii pp., 47 pl., map.

(22) ASHTON, P. S., *Ecological Studies in the Mixed Dipterocarp Forests of Brunei State*. Oxford Forestry Memoirs no 25, 1964, 75 pp., 37 pl., 4 App., tables, figs.

(23) ASHTON, P. S., *A Manual of the Dipterocarp Trees of Brunei State*. Oxford Univ. Press 1964, xii + 242 pp., 58 pl., 20 fig.

(24) *A Discussion on the Results of the Royal Society Expedition to North Borneo, 1961* (Proc. R. Soc. B, 161, 1964, p. 1-91, 36 fig., 3 tab.).

(25) MEIJER, W. & G. H. S. WOOD, *Dipterocarps of Sabah* (North Borneo). Sabah Forest Record no 5, 1964, 344 pp., 59 text fig., 30 pl., map.

(26) ASHTON, P. S., *A Manual of the Dipterocarp Trees of Brunei State and of Sarawak. Supplement*. Sarawak Forest Department 1968, viii + 129 pp., 23 pl., 15 fig.

(27) ANDERSON, J. A. R., is engaged in a checklist of trees of Sarawak.

Numerous important papers on the non-Indonesian parts were published by J. A. R. ANDERSON, P. S. ASHTON, E. F. (W. O.) BRÜNIG, E. J. H. CORNER, and W. MEIJER (mostly mimeographed at Sandakan by the Forestry Service); see also the *Unesco Symposium on ecological research in humid tropics vegetation*. Kuching 1963 (publ. 1965). Japanese botanists started with the publication of the results of their expeditions. A book, *Trees of Sabah*, is in preparation.

Cyclopaedia p. xxxix-xli:

#### Flora of New Guinea

Add:

(20) WOMERSLEY, J. & J. B. McADAM c.s., *The Forests and Forest conditions in the Territories of Papua and New Guinea*. Brit. Commonwealth For. Conf. 1957. 62 pp., with tabl. & photogr.

Numerous important papers resulted from the explorations of C.S.I.R.O., the Forestry Division

at Lae (incl. papers by P. VAN ROYEN), and the Australian National University, for the eastern half of the island; for reports on the western half see C. KALKMAN, W. VINK, and others.

*A Handbook of Natural Resources of Papua/New Guinea* by C.S.I.R.O., Canberra, is in preparation. The organization of the volume on Botany and Vegetation is in the hands of Dr. PAYMANS.

*A Manual of the Forest Trees of Papua and New Guinea* is issued, of which by now 9 parts appeared. Dept of Forests, Administration of Papua and New Guinea, Port Moresby.

The Division of Botany, Department of Forests, Lae, New Guinea, issues Botany Bulletins, including a 'Manual of the Grasses', and a *Check List of the Species of the Mount Wilhelm Flora*.

Cyclopaedia p. xl:

#### Preservation of Nature

Add:

(5) *Report of the Trustees for National Parks, 1959-1960*. Kuching, Sarawak, 35 pp., 8 photogr., 4 maps.

(6) WYATT-SMITH, J. & P. R. WYCHERLEY (ed.), *Nature Conservation in Western Malaysia*. Spec. Issue Mal. Nat. J., Kuala Lumpur 1961, viii + 261 pp., 45 pl., fig., maps.

(7) BASJARUDIN, H., *Problems of National Parks and Reserves in Indonesia and Emerging Countries*. IUCN Publ. n.s. no 10, 1968, p. 386-393, map (with principal conserved areas). Protected animals listed; survey of conserved areas in Indonesia; general organization of conservation in Indonesia.

(8) BASJARUDIN, H., *Nature Reserve and National Parks in Indonesia*. Present situation and problems. Stencilled account for IUCN 11T. M/J.6 session, New Delhi, Nov. 24, 1969, 6 pp.

(9) WYCHERLEY, P. R., *Conservation in Malaysia*. A manual on the conservation of Malaysia's renewable natural resources. IUCN Publ. n.s. Suppl. Paper no 22, 1969, 207 pp., stencilled.

(10) *National Parks of Malaysia* by various authors. Spec. double Issue Mal. Nat. J., Kuala Lumpur vol. 24, Aug. 1971, Part 3 & 4, p. 111-262, fig., pl., maps.

A MS overall survey: *Plant Conservation in the Malesian Tropics*, has been written by C. G. G. J. VAN STEENIS. Presumably it will be published in the future.

Cyclopaedia p. xli:

#### Pteridophyta

Add:

(15) HOLTUM, R. E., *A revised Flora of Malaya*. Vol. 2. *Ferns of Malaya*. Singapore 1955.

## 1. THE ETYMOLOGICAL USE OF VERNACULAR NAMES FOR MALESIAN PLANTS

Cyclopaedia p. xliii, 1st paragraph:

Correction: HUGH Low was no Veitch collector,

but contributed to his father's (later brother's) nursery at Clapton.

## CHAPTER II. THE TECHNIQUE OF PLANT COLLECTING AND PRESERVATION IN THE TROPICS

Cycl. Fl. Mal. I, 1, 1950, p. lxxi-lxix, and Suppl. l.c. 5, 1958, p. cccxxvii, add to

### 14. Selected literature etc.

ANONYMOUS (1962): Climbing mountains in Malaya (Mal. Nat. J. 16, p. 157-196, 3 fig., 2 maps, 8 photogr.).

ANONYMOUS (1965): Instructions for Collectors. No. 10. Plants. Brit. Mus. Nat. Hist. 6th ed. (repr. with amendments). London, 72 pp.

DAVIS, P. H. (1961): Hints for hard-pressed collectors (Watsonia 4, p. 283-289).

DEWOLF JR, GORDON P. (1968): Notes on making an herbarium (Arnoldia 28, p. (69)-(111), w. fig. a. pl., bibliogr.).

FOSBERG, F. R. & M.-H. SACHET (1965): Manual for Tropical Herbaria (Regn. Veget. 39, Utrecht, 132 pp., 16 fig.).

GUILLAUMIN, A. (1942): Formulaire technique

du botaniste préparateur et voyageur (139 pp., 82 fig.).

HEIM, R., MME S. JOVET-AST, R. LAINE & P. BOERELLY (1950): Conseils pour le récolte des Cryptogames (Paris, 32 pp., 6 fig.).

SANTAPAU, H. (1955): Instructions for field collectors of the Botanical Survey of India (Ministr. of Nat. Res. & Sc. Res. New Delhi, 16 pp.).

SIMON, C. (1962): Erfahrungen mit wenig bekannten Methoden der Herbarstechnik (Bauhinia 2, p. 63-69).

WOMERSLEY, J. S. (1953): Notes on the collecting of botanical specimens (Papua & New Guinea Gazette 8, p. 62-65, 5 fig.).

WOMERSLEY, J. S. (1957): Paraformaldehyde as a source of formaldehyde for use in botanical collecting (Rhodora 59, p. 299-303).

## CHAPTER V. DESIDERATA FOR FUTURE EXPLORATION

Cycl. Fl. Mal. I, 1, 1950, p. cvii-cxvi:

Since 1950 a considerable amount of collecting has been done in specific areas. A detailed enumeration as has been given in the Cyclopaedia would entail an immense lot of work and the outcome, still approximate, would hardly justify the time of

myself and others (whose help would be indispensable) spent on it. On the several Japanese expeditions in Malesia hardly any data are known to me.

It is for this reason that I will restrict myself to a recapitulation of the larger units.

RECAPITULATION: based on more approximate figures than the original one in the Cyclopaedia on p. cxii (with correction):

	<i>Surface sq. km</i>	<i>Collected to 1950</i>	<i>Collected to 1972</i>	<i>Density index 1950</i>	<i>Density index 1972</i>
1. Sumatra	479.513	87.900	99.000	18	21
2. Malay Peninsula	132.604	191.055	232.000	145	175
3. Java	132.474	247.522	260.500	187	197
4. Lesser Sunda Is.	98.625	24.545	36.000	25	36
5. Borneo	739.175	91.550	194.200	12	26
6. Philippine Is.	290.235	180.090	200.000	62	69
7. Celebes	182.870	32.530	34.000	18	19
8. Moluccas	63.575	27.525	30.400	43	48
9. New Guinea	894.855	106.775	233.000	12	26
Grand total	3.013.926	989.492	1.319.100	33	44

Within the areas some details are given below:

1. **Sumatra.** In W. Sumatra (W. MEIJER a.o.), N. Sumatra (W. J. J. O. DE WILDE a.o.), S. Sumatra (M. JACOBS a.o.).
2. **Malay Peninsula & Singapore.** Among the numerous new collections those on G. Tahan must be mentioned.
3. **Java.** Especially the extreme SW. part, Udjon Kulon and P. Peutjang (= Meeuwen I.) by several collectors; by HOOGERWERF in P. Bawean and extreme E. Java (G. Baluran, Meru Betiri, Purwo Blambangan); Nusa Barung (RAPPAARD); Christmas Island (MITCHELL).
4. **Lesser Sunda Islands.** In Bali, Lombok, Roti & Lomblen, Komodo. Very large collections in

Flores (SCHMUTZ), Sumbawa (KOSTERMANS), and Timor.

5. **Borneo.** In Sabah, Sarawak, and Brunei enormous collections have been made, several in series of the forestry services, but also by others. Mt Kinabalu in Sabah has been the aim of numerous expeditions, amongst which those of the Royal Society. In Indonesian Borneo (Kalimantan) in the SE. part near Bandjermasin.
6. **Philippine Islands.** Among the numerous collections many in the PNH series. Big collection in the Batan & Camiguin (Batanes Is.) by HATUSIMA.

7. Celebes. SW. Peninsula, some thousands.
8. Moluccas. In total some five thousands, including a big collection from Morotai (KOSTERMANS).
9. New Guinea and neighbouring islands. In the W.

part (Irian) some 10.000, collected by expeditions and in the BW series. In the E. part (Papua, Terr. of New Guinea, Bismarck Archipelago etc.) 100.000 collections, including many in the NGF and other series.

## CHAPTER VI. IMPORTANT SOURCES OF INFORMATION USED IN COMPILING THE LIST OF COLLECTORS

### a. SURVEY OF SOURCES GIVING DATA ON COLLECTORS, COLLECTIONS AND TRAVELS

Cycl. Fl. Mal. I, 1, 1950, p. cxvii-cxxv, and Suppl. *l.c.* 5, 1958, p. ccxlv:

#### General

##### 1. Published sources

Add:

SACHSE, J. D. W., *Verzeichniss von Bildnissen von Aerzten und Naturforschern seit den ältesten bis auf unsere Zeiten, mit Biographien*. 1. Heft (Schwerin 1847) (n.v.).

MUSGRAVE, A., *Bibliography of Australian Entomology 1775-1930* with Biographical Notes on Authors and Collectors (R. Zool. Soc. N.S.W. 1932). Sydney 1932.

HULTÉN, E., *History of Botanical Exploration in Alaska and Yukon Territories* from the time of their Discovery to 1940 (Bot. Not. 1940, p. 289-346, map).

List of collectors with extensive data on the Alaska itinerary, on p. 294-343.

ALDEN, R. H. & J. D. IFFT, *Early Naturalists in the Far West* (Occ. Pap. Calif. Ac. Sc. no 20, 1943, p. 1-59, incl. selected bibliogr.).

NISSEN, CLAUS, *Die botanische Buchillustration, Geschichte und Bibliographie*. Stuttgart 1951.

The bibliography in vol. 2, gives extensive data on draughtsmen, printers etc. of works containing botanical illustrations.

BUCK, PETER H., *Explorers of the Pacific*. European and American Discoveries in Polynesia (Bern. P. Bish. Mus. Spec. Publ. 43, 1953, 125 pp., with ill.).

Deals with the voyages proper; for the botanical results hardly of interest.

WHITTELL, H. M., *The Literature of Australian Birds*. A History and Bibliography of Australian Ornithology. Perth 1954.

With biographies, voyages, etc.

STREIT, Pater R., ctd by Pater J. DINDINGER, *Bibliotheca Missionum*. Vol. 21, Missionsliteratur von Australien und Ozeanien 1525-1950, Freiburg, Internat. Inst. f. Missionswiss. Forschung. 1955.

HANSEN, A., *Den danske botaniske litteratur, Bibliographia Botanica Danica, 1940-59* med tilhørende forfatter-biografier. København 1963.

PRESTWICH, A. A., *I name this Parrot*. Edenbridge, Kent, 1963.

STEENIS, C. G. G. J. VAN, *Reaping the Harvest. Retrieval of Names and Identifications by means of Identification and Collection Lists* (Fl. Mal. Bull. no 26, 1972, p. 2020-2037).

Also includes Personal collection lists or field books, and list of serial collection lists.

STERNSTEIN, LARRY & CARL SPRINGER, *An annotated bibliography of material concerning Southeast Asia from Petermann's Geographische Mitteilungen 1855-1966*. The Siam Society 1967.

Also includes the whole of Malesia as accepted in the Flora Malesiana.

CHAUDRI, M. N., I. H. VEGTER & C. M. DE WAL, *Index Herbariorum*. Pt II (3) I-L (Regn. Veg. vol. 86). Utrecht 1972, ed. by FRANS A. STAFLEU. Guide to the location and contents of the World's Public Herbaria.

#### Regional

##### 1. Sumatra and neighbouring islands

Cyclopaedia p. cxii add:

W. MARSDEN's History etc. is accompanied by a folio vol. of 19 pl. + map.

The plates consist of mostly useful plants, animals, etc.

##### 6. Philippine Islands

Cyclopaedia p. cxiv add:

QUISUMBING, E., *Botanical Expeditions in the*

*Philippines* (Proc. 8th Pac. Sc. Congr. 1953, vol. 4 Bot. 1957, p. 501-542, map).

MENDOZA, D. R., *Philippine Orchid Collectors* (Philip. Orch. Rev. 7, 1959, p. 17-36, 11 portr.).

History, collectors, bibliography of papers dealing with Philippine orchids.

QUISUMBING, E., *Botanical Explorations in the Philippines* (Philip. Geogr. J. 8, 1964, p. 21-38).

Chronology from 1588-1901, followed by an alphabetical list of botanists and/or plant collectors during the American regime and under the Republic of the Philippines.

## 9. New Guinea and neighbouring islands

New Guinea Gazette 8, no 2, Oct. 1953, p. 32–39).

Cyclopaedia p. cxxv add:

WOMERSLEY, J. S., *A brief History of Botanical Exploration of Papua and New Guinea* (Papua &VINK, W., *Botanical Exploration of the Arfak Mts* (Nova Guinea, Bot. 22, 1965, p. 471–494).

Review of former botanical explorers and their reports, incl. those by VINK and SLEUMER.

## b. REPORTS, PAPERS, AND OTHER INFORMATION PERTAINING TO HERBARIA WHERE MALESIAN COLLECTIONS ARE PRESERVED

Cycl. Fl. Mal. I, 1, 1950, p. cxxvi–cxli, and Suppl. l.c. 5, 1958, p. ccxlv–ccxlvii, add:

## 1. General

RAU, M. A., *Herbaria and Botanical Museums in the U.S.S.R.* (Bull. Bot. Surv. India 6, 1964, p. 73–76).MILLER, HORTENSE S., *The Herbarium of Aylmer Bourke Lambert. Notes on its Acquisition, Dispersal, and present whereabouts* (Taxon 19, 1970, p. 489–553).2. Special<sup>1</sup>

Berlin, Germany

## Herb. Berlin-Dahlem (Berolinense).

HIEPKO, P., *Herbarium Willdenow Alphabetical Index* (Interdocumentation Cy AG Zug, Switzerland, xvii pp).

An introduction to this Index, made from the handwritten original by L. KRUG, with corrections, and an English introduction, has been reproduced on microfiches by H. L. DE MINK.

Caen, France

## Herb. Caen.

HARTOG, C. DEN, *The Herbarium of the Institut botanique de la Faculté des Sciences, Caen* (Fl. Mal. Bull. no 20, 1965, p. 1270–1271).

\*Cork, Eire

## \*Herb. Cork University.

PARKS, H. M., *Some notes on the Herbarium of University College, Cork* (Irish Nat. J. 11, 1953, p. 102–106) (n.v.).

Dehra Dun, India

## Herb. Forest Research Institute.

RAIZADA, M. B., *The Dehra Dun Herbarium: its Origin, History and Mission* (J. Sen Mem. Vol. Bot. Soc. Beng. 1969, p. 487–498).

Especially dealing with the India collections. Much information on early superintendents.

\*Dublin, Eire

## \*Nat. Mus. Dublin.

JOHNSON, T. & MISS M. C. KNOWLES, *The Levinge Herbarium* (Sc. Proc. R. Dublin Soc. n.s. 10, 1903, p. 122–132).

Private fern herbarium from India, Ceylon, etc. was left by will in 1896. No mention of Malesian collections is made.

Edinburgh, Scotland

## Herb. Royal Botanic Garden.

HEDGE, I. C. & J. M. LAMOND (ed.), *Index of Collectors in the Edinburgh Herbarium* (Edinburgh 1970, 147 pp.).

The book includes general references, collectors in geographical areas, cryptogamic collectors, and a Main list of collectors.

The foreign herbarium of the Glasgow University was incorporated in the general herbarium on permanent loan, in 1965. In 1966 the collection of Hull University (5000 specimens, mostly from New Caledonia) was added.

## \*University Herbarium.

The entire foreign herbarium (excl. cryptogams) has been incorporated in the general herbarium of the Royal Botanic Garden, Edinburgh, in 1965.

\*Glasgow, Scotland

## \*Herb. R. Coll. of Science and Technology.

LLOYD, B., *The Herbarium of the Royal College of Science and Technology* (Glasgow Naturalist 18, 1964, p. 363–368).

Includes a.o. duplicates from WALLICH, CUMING, BUCHANAN, SINCLAIR, etc.

\*Hull, England

## \*Herb. Hull University.

In 1966 the collection was added to the Herbarium at Edinburgh (see there).

\*Liverpool, England

## \*Herb. Mus. Liverpool.

*Handbook & Guide to the herbarium collections in the public museums*, Liverpool. Liverpool 1935.

This beautiful handbook produced by Mr H. STANSFIELD enumerates the more important collectors who contributed to the Museum collections. It gives biographies, portraits, photographs of their herbarium specimens, and references.

(1) New herbarium entries are provided with an asterisk.



## London, England

**Herb. Brit. Museum (Nat. Hist.).**

DANDY, J. E., *The Sloane Herbarium etc.* Add: London 1958.

A beautiful work with extensive information and a collection of facsimiles of handwritings of the contributors to that Herbarium.

## Manila, Philippines

**Philippine National Herbarium.**

In 1964 the number of mounted specimens totalled 88,000. These were acquired only after the war through new botanical collections, exchanges, donations, and purchases.

Pre-war loans of mounted botanical specimens by the former herbarium of the defunct Bureau of Science to the Arbold Arboretum, totalling 3299 with 134 types, were returned to the P.N.H. by the Harvard University Herbarium.

The handwritten register of the F.B. collections was saved and is now kept at the Institute of Wood Technology, F.P.R.I. College, *Laguna*. It contains identifications, collectors' names, localities, etc. (1903-1940). The pertaining herbarium specimens were destroyed during World War II, but duplicates have been distributed. Efforts are made to have the data copied and distributed.

## Montpellier, France

**Herb. Inst. Bot. de l'Université.**

GRANEL DE SOLIGNAC, L. & Mlle L. BERTRAND, *Les herbiers de l'institut de botanique de Montpellier*

(Naturalia Monspelienisia Sér. Bot. fasc. 18, 1967, p. 271-292).

Includes Herb. CAMBESSÈDES and numerous other famous collections. It contains plants collected by PERROTTET, GAUDICHAUD, THUNBERG.

## Oxford, England

**Herb. Oxford University.**

DRUCE, G. C. & S. H. VINES, *The Dillenian Herbaria*, an account of the Dillenian collections in the herbarium of the University of Oxford. Oxford 1907.

CLOKIE, H. NEWMAN, *An account of the Herbaria of the Department of Botany in the University of Oxford*. Oxford 1964.

## Sandakan, Sabah (North Borneo)

**Herb. Forest Department.**

Jan. 31, 1961, unfortunately the mounted collections were all destroyed by fire. A new collection has been built up.

MEIJER, W., *The History and Prospects of Forest Botany in Sabah*. Forest Dept. 1964.

Includes information on the Herbarium.

## \*Taipei, Taiwan

**\*Herb. Bot. Dept. Taiwan University.**

See under Taihoku, Fl. Mal. I, 1, 1950, p. cxl.

**\*Herb. Taiwan Forestry Research Institute.**

Includes some Malesian collections made by Japanese botanists.

### c. SELECT LIST OF ORIGINALLY PRIVATE HERBARIA AND THEIR PRESENT LOCATION

Cycl. Fl. Mal. I, 1, 1950, cxli-cxlii, and Suppl. l.c. 5, 1958, p. ccxlvii-ccxlviii add:

GOWER, W. H., Herb. Edinburgh, and Kew.

GREVILLE, R. K., Herb. Edinburgh (also ex Glasgow).

LAMBERT, A. B., also in Herb. Edinburgh and Florence (with WEBB).

LEHMANN, was sold in 1861 (he lived in Hamburg).

LÉVEILLÉ, H., Herb. Edinburgh (acq. 1919).

MENZIES, A., bequeathed to Edinburgh in 1842.

MOORE, THOMAS, fern herb. in Kew; dupl. in Herb. Edinburgh.

SERINGE, N. C., Herb. Edinburgh (also ex Glasgow).



# SPECIAL PART

## LEGEND TO ABBREVIATIONS AND SYMBOLS

Cycl. Fl. Mal. I, 1, 1950, p. 3–4, and Suppl. *l.c.* 5, 1958, p. ccxlix:

**1. Abbreviations of Herbaria and collecting series** To the name changes add:

Add:

See the list by M. JACOBS, *Collections cited under Abbreviations* (Fl. Mal. Bull. no 22, 1968, p. 1571–1578, 1816).

### **4. Geographical names and abbreviations**

Add:

*F.M.S.* = Federated Malay States

*F.R.* = Forest Reserve

**Malesia** = formerly Malaysia in the Cyclopaedia. As the latter name was officially adopted for the new federation of the Malay Peninsula, Sarawak, and North Borneo, in Flora Malesiana the name 'Malesia' is now used for the geographic delimitation of its area.

*Sabah* = (Br.) North Borneo.



# ALPHABETICAL LIST OF COLLECTORS†

## \*Abbe, Ernst Cleveland

(1905, Washington, D.C., U.S.A.; x), botanist, educated at Cornell University (B.S. 1928; M.S. 1930), and Harvard University (M.S. 1931; Ph.D. 1933); from 1935 to the present on the staff of the Botany Dept., University of Minnesota, Minneapolis, U.S.A.; from 1959–1962 National Science Foundation Fellow, studying *Fagaceae* and *Myricaceae* especially in SE. Asia. He is usually assisted by his wife, L. B. ABBE (see there).

**COLLECTING LOCALITIES.** From Sept. 1959–June 1960.<sup>1</sup> *Malay Peninsula*: Mersing, Ulu Gombok F.R., Kuala Lumpur, Fraser's Hill, Cameron Highlands; several places in Thailand, Cambodia, and Vietnam; *Malay Peninsula*: Temerloh, Quantan, Jerantut; *Sarawak* and *N. Borneo*: Kuching, Brunei, Mt Kinabalu; *Philippines*, *Luzon*: Laguna.—1962. Early in the year on Mt Kinabalu in *N. Borneo* with W. MEIJER. *E. New Guinea*: Mt Otto (June).—1964. *Sarawak* (May–Aug.).

**COLLECTIONS.** The joint collections of Professor and Mrs ABBE will be deposited in: *Herb. Kew, Singapore, Harvard Univ., Thai Forest Dept., Univ. of Minnesota*; woods to the Yale Record Collection, and the Nat. Mus. Washington, D.C. In the *Malay Peninsula* about 100 nos were collected with KADIM BIN TASSIM.

**LITERATURE.** (1) Cf. Ann. Rep. Bot. Gard. Dept. for 1959, Singapore 1960, p. 4, 7, 11.

**BIOGRAPHICAL DATA.** In *Who's who in America* vol. 28.

## \*Abbe, Lucy Boothroyd

(1906, Ithaca, N.Y., U.S.A.; x), biologist, educated at Cornell University (A.B. 1928; M.S. 1930); since 1944 on Biology Dept Staff, Macalester College, St. Paul, Minnesota; since 1950 Assistant Professor of Biology. Married to Prof. ERNST C. ABBE (see there for Itinerary, Collections, etc.).

## Addison, George Henry

retired April 22, 1959 (cf. Fl. Mal. Bull. no 14, 1959, p. 620), and repatriated.

## Adelbert, Albert George Ludwig

(d. 1972, The Hague, Netherlands).

For several years he was a botany teacher in a secondary school and was later attached to the School Museum, both in The Hague.

**BIOGRAPHICAL DATA.** Fl. Mal. Bull. no 26, 1972, p. 1993.

## \*Agim bin Ambullah, see Forest Dept North Borneo.

## \*Agra, Melecio, see Philippine National Herbarium.

## \*Ahmad bin Shukor

collected with Dr R. HILL in Johore, 1970; in

1971 with E. A. HEASLETT, and with T. C. WHITMORE. *Herb. Sing.*

## Alcasid, ? G.L.

collected with EDANO as early as 1939.

## \*Aldos, B., see Philippine National Herbarium.

## Aleqaen, Venancio

was later Assistant Professor at Ilo College, University of the Philippines.

## Allen, B. E. G. Molesworth

Author of papers on ferns, a regular contributor to the *Malayan Naturalist Journal*, and author of a book on *Malayan Fruits* (1967).

She left Malaya on retirement in June 1963.

**COLLECTING LOCALITIES.** Add: 1959. *Malaya*: Ipoh Distr., Perak (with KADIM); G. Bujong Malacca (Aug. 10), Bt Batu Suloh via Kinta Forest (12), G. Tempurong (13), Oversea Kubor Chinese Tin Area (15).

## Allen, Edgar Francis

Add: Together with his wife he collected living plants on Mt Kinabalu in Jan.–Feb. 1966. They were brought back to England (at least partly in Kew Gardens).<sup>1</sup>

**LITERATURE.** (1) E. F. ALLEN: 'A mountain hunt yields garden treasures' (*Straits Times Annual* 1973, p. 146–147, photogr.).

## \*Alphonso, A. George

obtained the Kew diploma in 1956 after a two years' study course at Kew Gardens. In March 1957 appointed Curator of the Botanic Gardens Singapore. He has a special interest in orchids.

**COLLECTING LOCALITIES.** 1959. *N. Borneo* (Nov. 14–Dec. 3): Crocker Range, near Tenom, Tambunan and Patau, on the Keningau Plateau, on the Baiaio and Biah Rivers; *Sarawak*: at Bau.—1960. *Langkawi Is.* (on limestone; Nov.–Dec.).—1962. *Sarawak* (May 30–June 22): Niah, Undup R., and Batu Lintang.—1963. *Malaya*.—1965. *Malaya*: Trengganu.—1966. *N. Borneo*: Mt Kinabalu (Sept. 13–30). Possibly many times more.

**COLLECTIONS.** In *Herb. Sing.*: 84 nos from *N. Borneo* (1959); dupl. *Herb. Edinb.* Mostly collecting living plants.

## Alston, Arthur Hugh Garfit

**COLLECTIONS.** Add *Java* nos 15378–15576; *Borneo* nos 13029–13462 (instead of 13576–15377); *Sumatra* nos 15376–15377.

**BIOGRAPHICAL DATA.** *Brit. Fern Gaz.* 8, 1958, p. 220–221; *Amer. Fern J.* 49, 1959, p. 1–2; *Taxon* 8, 1959, p. 83–86, portr.; *J. Soc. Bibliogr. Nat. Hist.* 3, 1960, p. 383–404 (bibliogr., list of new taxa, nomencl. changes).

## \*Altona, Th.

of the Dutch East Indian Forest Service collected at Rembang, *Java* (1922), in the series of

(†) New entries are provided with an asterisk.

BEUMÉE. He had no separate entry in the Cyclopaedia (Fl. Mal. I, 1, 1950).

\*A.M., see A. MENZIES.

\*Ampuria, see Forest Dept North Borneo.

# Anang

(d. Oct. 4, 1952, Bogor, Indonesia).

Anderson, James Aidan Robb

got his Ph.D. at the University of Edinburgh (1961, *in absentia*), on a thesis dealing with the peat swamp forests of Sarawak and Brunei.<sup>1</sup>

He was on leave in spring 1971 and would return in the middle of the year for a final short tour before his retirement. He settled at Edinburgh and acts as a consultant to forestry services and timber companies. He is writing a checklist of Sarawak forest trees.

*Jarandersonia* KOSTERM. and *Goniothalamus andersonii* J. SINCLAIR were named after him.

COLLECTING LOCALITIES. NW. Borneo add: G. Mulu and Api up the Baram River (June–July 1960), limestone hills; on the principal limestone hills in Sarawak. *Terr. of New Guinea*: Mt Wilhelm (Sept.).—1964. Sarawak: 2-weeks' trip to the Kelabit Highlands, based at Bario (June 19 onwards), collecting > 200 nos; G. Selabor, Serian Distr.—1969. With ILIAS BIN PAIE to Ulu Melinau, Hose Mts, Mt Murud; Mt Batu Tibang (Centr. Borneo) (June).<sup>2</sup>—1970. Kalimantan (Indon. Borneo): Kutai Nature Reserve with a small party of BIOTROP, Indonesia (exploring 6 weeks in May etc.).

COLLECTIONS. His series should be cited with the prefix 'Si', with the date of collecting, but the stamped number on the label should be discarded.<sup>3</sup> Dupl. also in *Herb. Edinb.* The Mt Wilhelm plants numbered 1–22.

LITERATURE (1) Author of 'Field Check List of Trees of Peat Swamp Forests of Sarawak' (mimeogr., 4 + 18 pp.); 'The Flora of the Peat Swamp Forests of Sarawak and Brunei etc.' (Gard. Bull. Sing. 20, 1963, p. 131–228, 10 pl., 3 tabl., 1 map).

(2) Cf. Fl. Mal. Bull. no 25, 1971, p. 1890.

(3) Cf. Fl. Mal. Bull. no 21, 1966, p. 1434.

Anderson, Thomas (add:) A.

COLLECTIONS. Java and Singapore dupl. (1861) in *Herb. Edinb.*

Anderson, William

(d. 1778).

BIOGRAPHICAL DATA. Add: In H. M. WHITELL: 'The Literature of Australian Birds' 1954, pt 2, p. 12–13.

# \*Ando

of Osaka City University, spent 5 months (Oct. 1968–Mar. 1969) in many areas of the state Sabah (N. Borneo), with KOKA WA and HORTA (see there). Special attention was given to Tawau Hills and Silabukan in the south and to Kinabalu and Trus Madi on the west coast.

Andrews, Charles William

COLLECTIONS. Dupl. *Christmas I.* (Indian Ocean) 1897 in *Herb. Edinb.*

# \*Ang Gek Choo

of the Singapore Herbarium, collected in Malaya at least in 1963, and from Feb. 28–Mar. 6, 1965, at Penang Hill and on Maxwell's Hill in Perak (181 nos), and from Oct. 5–16 at Penang Hill and in the Cameron Highlands (few numbers). Presumably in *Herb. Sing.*

\*Angian, see Forest Dept North Borneo.

Añonuevo, Prudencia

(1926, Bucalbalcan, Sorsogon, Luzon, P.I.; x) was employed in the National Museum at Manila from Aug. 1947 to Feb. 1951.

COLLECTING LOCALITIES. 1947–51. Philippines. Luzon: Abra and Mountain Province; Palawan; Mindanao: Mt Apo, Cotabato; Basilan. COLLECTIONS. In PNH Manila.

\*António, Engl-Silv. F.

collected grasses in *Portug. Timor* from Oct.–Dec. 1961. In *Herb. Lisbon.*

# \*ANU nos<sup>1</sup>

a series of the Australian National University, made by staff and students working under Dr DONALD WALKER in the Department of Geography of the Institute of Advanced Studies. Apart from Dr and Mrs (PAT) WALKER\*, collectors are: JOHN FLENLEY\*, JOSSELYN WHEELER\*, Dr DONALD MACVEAN\*, and L. KEITH WADE\* in *New Guinea*, and MARTIN KELLMAN\* in *Mindanao* (Philippines). See under the separate entries.

Appelman, Frederik Johannes

(d. 1965, The Hague, Netherlands).

BIOGRAPHICAL DATA. Blijdorp Geluiden 13, no 4, Apr. 1965, p. 2–3, with portr.; Panda Nieuws 1, no 8, Apr. 1965, p. 1; Vakbl. Biol. 45, 1965, p. 74–76; Meded. Ned. Com. Int. Nat. Besch. 19, 1965, p. 13–25, with portr. a. bibliogr.

Arañez, Adoracion T.

Student, taking a Master's degree in Botany; Instructor of Botany in the University of the East.

# \*Ardley, John H.

Entomologist with the Papua and New Guinea Department of Agriculture; subsequently Technical Adviser-Entomology with William Cooper & Nephews, PTY. Ltd. at Concord, N.S.W., Australia.

COLLECTIONS. Mainly Sarawak (*New Guinea*) plants associated with insect pests or food plants of insects. Partly numbered serially under collector's name, others without number; in *Herb. Lae*. New Zealand plants in *Herb. Domin. Mus. Wellington*.

\*Ardzi bin Arshid, see Forest Dept Sarawak.

# \*Ariëns

COLLECTIONS. In the Leyden Herbarium archives a list was found of some (88) rare dried

(1) An asterisk refers to a separate entry with more particulars.

plants from *Java*, which were packed in a case addressed to Mr FRITZE (Dr A. E. FRITZE, Head of the Medical Service in the D.E.I.), and later received by BLUME; presumably in Herb. Leyden, dating from the first half of the 19th century.

\***Ariffin**, see Forest Dept Sarawak.

**Armit**, William Edington de Margrat

When in *Goodenough I.* (May/June 1894) he visited the summit of Mt Oiamadawa'a (cf. Am. Mus. Novit. no 1792, p. 7).

**Arnold**, Joseph

Add: In 1815 he sailed from Australia homeward bound in the "Indefatigable". The ship touched Batavia (Sept. 3), and burnt out on Oct. 22 in the harbour. In this way ARNOLD was forced to stay in *Java*<sup>2</sup> for more than 3 months before having the opportunity of a passage to England in the "Hope". He botanized a.o. at Ciceroa (= Tjiserua) and visited G. Tangkuban Prah. The living plants he brought from Java for Sir J. BANKS were dead on arrival (by rats, seawater, etc.). He evidently drew some Java plants.

He left England for Sumatra in Nov. 1817.

ARNOLD's letters from Sumatra are published by Dr J. BASTIN.<sup>3</sup>

RAFFLES stated in a letter to DAWSON TURNER, dated 12 April 1820, that ARNOLD's collections in Sumatra were altogether unimportant and that the few plants were examined by Dr HORSFIELD who did not think them of much interest. They were forwarded with the rest of their collections to Mr BROWN, i.e. *Herb. Brit. Mus.* (Dr J. BASTIN i.l. 28 Nov. 1972).

**COLLECTIONS.** The collections of shells etc. were apparently sold at auction by the Linnean Society on 10 Nov. 1863; present whereabouts unknown. A copy of their description is in Mitchell Library, Sydney (Dr J. BASTIN in litt., July 1972).

**LITERATURE.** (2) His *Java Journal* will in due time be published by Dr J. BASTIN (London). See J. Mal. Br.R.As. Soc. 46 (1973), pt. 1, 92 pp., 11 pl. (3) J. Soc. Bibliogr. Nat. Hist. 6 (1973) p. 305–372, 4 pl. (1 portr.).

**BIOGRAPHICAL DATA.** Add: Portr. in Str. Times Annual for 1971, p. 60.

\***Asah anak Unyong**

Collector for the Forest Dept Brunei, at least in 1958.

**Ashton**, Peter Shaw

Ph.D. Cambridge (1962). From Oct. 1962 Forest Botanist at Kuching, Sarawak. In 1966 appointed Lecturer in Tropical Botany at the University of Aberdeen.

Author of papers on *Dipterocarpaceae*, and the forests of Brunei and Sarawak, and Tree Manuals. *Knema ashtonii* SINCLAIR was named after him.

**COLLECTING LOCALITIES.** Add: From 1963 onwards in Sarawak. 1963. 6 weeks' trip to the Similajau Forest Reserve, Bintulu, across the watershed to Ulu Belaga and Sibit (Mar.–Apr.); 10 days in Bako National Park (May); 4 weeks in the Tatau-Mukah area (Sept.–Oct.).—1964. To Bt. Kajang and the Ulu Mujong part of the Hose Mts

(7 weeks, from Mar. 10 onwards, collecting c. 800 nos); Santubong (2½ weeks from May 29 onwards); Lambir Hills (2nd half of June, coll. 150 nos); accompanying T. D. PENNINGTON (see there) for a week in Nov.—1965. Ulu Dapoi, Tinjar (Mar.–Apr.), plateau of Usun Apau (coll. 600 nos); Ulu Temburong (in Brunei) for 3 weeks; Bako National Park (July–Aug.).

**COLLECTIONS.** Mostly palms and dipterocarps in 1963. Also dupl. in *Edinb. Herb.*

**LITERATURE.** (1) P. S. ASHTON: 'The Plants and Vegetation of Bako National Park' (Mal. Nat. J. 24, 1971, p. 151–162, map, pl. 53a–58b).

\***Assem**, Johannes van den

(1930, Rotterdam, Netherlands; x), zoologist educated at Leyden University (M.S. 1954); from Apr. 1956–Apr. 1959 entomologist of the 'Malaria-bestrijding' of the Medical Service in New Guinea. Later on the staff of the Zoological Laboratory at Leyden. Ph.D. at Leyden (1967).

**COLLECTIONS.** Some tens of weeds collected at Ifar, Hollandia, North New Guinea (Oct. 1956); in *Herb. Manokwari* and *Leyden*.

**Atje**

= Rd. ATJE ADIWIDJAJA (d., Maseng near Bogor, Indonesia).

\***Awing**, James, see Forest Dept North Borneo.

**Backer**, Cornelis Andries

(d. 1963, Heemstede, N.H., Netherlands).

**BIOGRAPHICAL DATA.** Vakbl. Biol. 43, 1963, p. 65–66; Taxon 12, 1963, p. 173–177, w. portr., facsim. handwriting; in BACKER & BAKHUIZEN f., Flora of Java 1, 1963, p. xi–xx, w. portr.; Blumea 12, 1963, p. 1–4, w. portr.

\***Baker**, C., see sub M. A. CARNE.

\***Bakhuizen van den Brink**, Karel Johan

(1918, Buitenzorg, Java; Feb. 28, 1957, on board, off the Cocos Islands, on the voyage to Holland), younger brother of R. C. BAKHUIZEN VAN DEN BRINK Jr (see there), lastly Assistant on a tea estate S of Buitenzorg.

He is mentioned on the labels as the collector of *Cyperaceae*, etc., in total > 74 nos in the years 1922–23, evidently in the wake of his father; material in *Herb. Bog.*

\***Baldemor**, J., see Forestry Bureau, Manila.

\***Balfour**, Andrew Francis

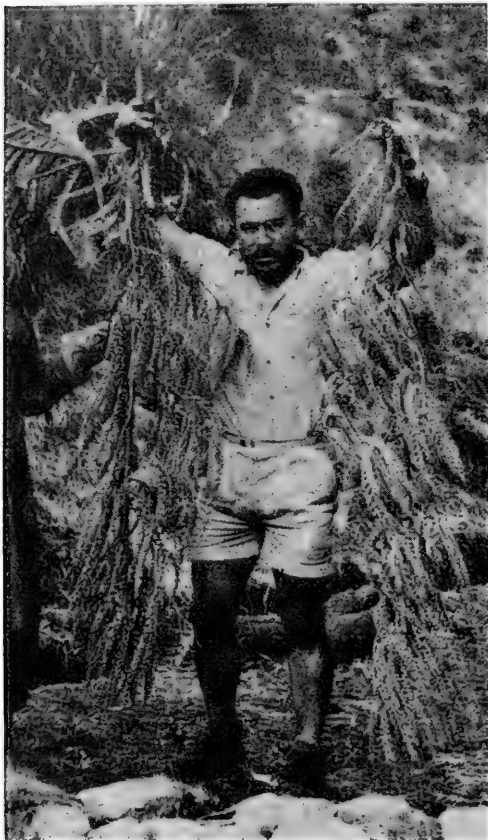
lieutenant of the Royal Navy, is recorded as the collector of 9 plants from the summit of Ternati (5000 ft) in the *Philippines*, and of a specimen of 'Elang-Elang' from Manila. The Peak of Ternate is rightly situated in the *Moluccas*. In *Herb. Edinb.* (Trans. & Proc. Bot. Soc. Edinb. 12, 1876, p. lxi).

\***Balgooy**, Max Michael Josephus van

(1932, Poerbalingga, Java; x), botanist, educated at the University of Indonesia, Bandung (1952–57), and at Leyden University (1958–61), Ph.D. 1971 on a plantgeographical analysis of the Pacific. Since 1961 on the staff of the Rijksherbarium, Leyden.

He visited New Guinea, Australia, Lord Howe I., and Java in 1965.<sup>1</sup> In 1971 he attended the Pacific Science Congress in Australia, and made a collecting trip to Tahiti.

ITINERARY 1952-53. *W. Java*.—1965 (Mar. 30-Aug. 14).<sup>1</sup> Leaving Holland (Mar. 30), travelling by way of Sydney and Canberra to Lae, *Terr. of New Guinea* (arriving about Apr. 12); two one-day trips with VAN ROYEN to Busu R. and



VAN BALGOOY

Markham R.; Apr. 15 starting from Goroka for Keglsugl (c. 2600 m) and from there on foot to Mt Wilhelm, basecamp near Lake Aunde (3560 m) until July 8; *Java*.

COLLECTIONS.<sup>2</sup> 993 *New Guinea nos* collected above 2600 m, mosses included; in *Herb. Leyden*; dupl. elsewhere.

Several unnumbered specimens mostly from *W. Java* in the educational herbarium of the Univ. of Indonesia, Bandung, coll. 1952-53.

LITERATURE. (1) M. M. J. VAN BALGOOY: 'Report of an expedition to New Guinea, Australia and Indonesia' (mimeographed, Leiden 1965).

(2) K. THOMASSON: 'Phytoplankton from some lakes on Mt Wilhelm, East New Guinea' (*Blumea* 15, 1967, p. 285-296).

BIOGRAPHICAL DATA. *Curr. Vitae* in Thesis Leyden 1971.

**Bally, Walter (F. E.)**

(d. 1959, Geneva, Switzerland).

BIOGRAPHICAL DATA. *Verh. Schweiz. Naturf. Ges.* 139, 1959, p. 379-384, portr., bibliogr.

**Bangham, Walter Nicholas**

(d. 1954 or 1955, Kisaran, Sumatra East Coast, Indonesia). In the fifties Consultant of the Good Year Rubber Co.

**Banks, Sir Joseph**

COLLECTIONS. Also dupl. Cook's 1st Voyage in *Herb. Edinb.*

LITERATURE. (1) Add: J. C. BEAGLEHOLE: 'The Endeavour Journal of Joseph Banks' (1st ed. Sydney 1962, 2 vols).

(3) Add to 'Illustrations of the Botany etc.': For particulars on the drawings, see CL. NISSEN, 'Die botanische Buchillustration etc.' 1951, vol. 2, p. 7.

E. W. GROVES: 'Notes on the Botanical Specimens collected by Banks and Solander on Cook's first voyage, together with an Itinerary of Landing Localities' (*J. Soc. Bibliogr. Nat. Hist.* 4, 1962, p. 57-62).

D. J. MCGILLAVRY: 'A checklist for the illustrations of the botany of Cook's First Voyage' (*Contr. N.S.W. Nat. Herb.* 4, 1970, p. 112-125).

(5) Add: See also J. RAMSBOTTOM: 'Banks and Solander's duplicates' (*J. Soc. Bibliogr. Nat. Hist.* 4, 1963, p. 197).

(6) See further: W. T. STEARN: 'The Botanical Results of the Endeavour Voyage' (*Endeavour* 27, 1968, p. 305-309, 1 fig., 4 phot.): 'A Royal Society Appointment with Venus in 1769. The Voyage of Cook and Banks in the Endeavour in 1768-1771 and its Botanical Results' (*Not. & Rec. R. Soc. Lond.* 24, 1969, p. 64-90, map facing p. 90).

BIOGRAPHICAL DATA. Add: W. R. DAWSON, 'The Banks Letters. A Calendar of the Manuscript Correspondence of Sir Joseph Banks etc.' (London 1958); *Proc. R. Soc. Queensl.* 83, 1972, p. 1-19, portr.

\*Banlugin, G., see Philippine National Herbarium.

**Banzon, Gregoria T.**

Instructor of Zoology, University of the Philippines.

**Barclay, George**

LITERATURE. (3) Add: P. H. RAVEN: 'George Barclay and the 'California' portion of the Botany of the Sulphur' (*Aliso* 5, 1964, p. 469-477; incl. list of plants).

**Bartlett, Harley Harris**

(d. 1960, Michigan, U.S.A.).

ITINERARY. 1935. *Philippines*, add: Mt Iraya, *Batan I.* (July).

COLLECTIONS. *Philippine* collections distributed by the University of the Philippines, a.o. to *Herb. Berkeley*.

BIOGRAPHICAL DATA. *Bull. Torr. Bot. Club* 88, 1961, p. 47-56, portr., bibliogr.

**Baskiñas, Leticia**

Instructor of Botany, Araneta University; later married to a botanical colleague and living in Hawaii.

**Batten-Pooll**, Arthur Hugh  
(d. 1971 or early 1972, England).

**Baudin**, Thomas Nicolas  
BIOGRAPHICAL DATA. In A. A. PRESTWICH,  
I name this Parrot, 1963, p. 6-7.

**Bauer**, Ferdinand Lucas  
COLLECTIONS. Add: On the whereabouts of  
his original drawings, see CL. NISSEN, 'Die  
botanische Buchillustration' 1951, vol. 2, p. 9.

**Bayer**, Frederick Merkle  
Add (to Suppl. Cycl. Fl. Mal. I, 5, 1958, p.  
cclvii):

(1921, Asbury Park, N.J., U.S.A.; x) zoologist,  
B.S. Miami (1948), M.S. Washington (1954),  
Ph.D. 1958. Assistant Director State Museum  
Florida 1942-46; Assistant Marine Lab. Miami,  
1946-47; Assistant Curator (1947-51) and Associ-  
ate Curator (1951-61) of the U.S. National  
Museum; Associate Professor Institute Marine  
Science, Univ. of Miami (1962-63), and Professor  
from 1964-

He accompanied several expeditions, e.g. to  
Bikini, Palau and the Gulf of Guinea.

His interests are biological oceanography,  
ecology of coral reefs and taxonomy of *Octocorallia*,  
*Mollusca*, and *Pterobranchia*.

He occasionally collects ferns.

\***Bebob**, Aban, see Forest Dept North Borneo.

**Beccari**, Odoardo  
COLLECTIONS. The type locality Mt Poe (Poi),  
Sarawak, given for several Sarawak plants, is  
according to Dr B. L. BURTT not the G. Poi used  
as a name on modern maps, but a more south-  
easterly peak in the range, G. Berumput (cf. Fl.  
Mal. Bull. no 19, 1964, p. 1131-1132). *Sumatra*  
dupl. in *Herb. Edinb.*

LITERATURE. (2) Add: For annotations on the  
itinerary cf. W. VINK in *Nova Guinea*, Bot. 22,  
1965, p. 479, and fig. 6.

(5) Add: For annotations on the itinerary cf.  
W. VINK in *Nova Guinea*, Bot. 22, 1965, p. 479-  
481, fig. 6.

(11) Add: On the drawings, see CL. NISSEN,  
'Die botanische Buchillustration' 1951, vol. 2, p.  
11.

**Becking**, Johannes Hendrikus  
(d. 1972, Arnhem, Gld., Netherlands).  
COLLECTIONS. Add: 20 plants from former  
*Dutch New Guinea (Irian)*, collected in 1961; in  
*Herb. Wageningen*.

\***Behr**, Hermann Hans  
(1819, Köthen, Germany; d. 1904), a medical  
man who was for a long time a resident in South  
Australia. In Dec. 1849 he wrote a letter from  
Manila telling of his plan to stay there and to set  
up as a medical practitioner. Later he settled in  
California. Author of some botanical papers<sup>1</sup>.  
*Aristida behriana* F.v.M. was named in his  
honour.

COLLECTIONS. He made natural history col-  
lections; Australian plants in *Herb. Melbourne*.  
As yet no Philippine collections known.

LITERATURE. (1) E.g.: 'Synopsis Genera of  
Vascular Plants San Francisco' (1884).

BIOGRAPHICAL DATA. Bot. Zeit. 7, 1849, p.  
873; *ibid.* 8, 1850, p. 335; DÖRFLER, Bot. Adress-  
buch 1902, p. 240; BRITTEN & BOULGER, Biogr.  
Index, 2nd ed. by RENDLE, 1931; Index Herb. pt  
2 A-D, 1954.

**Bélanger**, Charles Paulus  
COLLECTIONS. *Java* dupl. (1833, probably  
acq.) in *Herb. Edinb.*

LITERATURE. (1) Add: cf. R. ROSS in *Taxon*  
13, 1964, p. 193-196.

Drawings of the botanical atlas made by BORY  
DE ST VINCENT and E. DELILE.

**Benecke**, Franz F.  
collected also in *E. Java*, Mar.-Apr. 1891;  
dupl. in *Vienna*.

**Benthem Jutting**, W. S. S. van, see sub FEEN-VAN  
BENTHEM JUTTING, W. S. S. VAN DER.

\***Bergman**, Mrs Dagny  
wife of STEN BERGMAN, accompanied her  
husband during part of his travels in former  
*Dutch New Guinea*, from where they returned in  
spring 1959.

COLLECTING LOCALITIES. Former *Dutch New*  
*Guinea*. Mostly in Swart Valley at c. 1600-2000 m  
alt., but also at Steenkool, near Tembuni (Feb.-  
Mar. 1957), and on the S. coast near Asmat (June  
1958).

COLLECTIONS. *Herb. State Mus. Stockholm*:  
717 nos, mostly orchids and ferns, but also mosses<sup>1</sup>.  
LITERATURE. (1) E. B. BARTRAM: 'Additions  
to the Moss Flora of Netherlands New Guinea'  
(*Svensk Bot. Tidskr.* 54, 1960, p. 483-487).

**Bergman**, Sten  
Additions to Suppl. Cycl. Fl. Mal. I, 5, 1958,  
p. cclviii:

ITINERARY.<sup>3</sup> After *Beeuw* insert: (= *Beo*).  
Add: Leaving *Sorong* (Dec. 3) by boat to *P. Adi*  
on the S. coast of New Guinea by way of Fak-Fak,  
exploring the islet and the opposite mainland near  
Kambala; returning via Fak-Fak, Kokas, and  
Inanwatan to *Sorong*; returning to Inanwatan  
(leaving *Sorong* Feb. 5, 1949) for a trip into the  
interior: by canoe to kp. Bahru; Atinjoe, from  
where (15) to Susemok, Fanatof, Aifat River,  
Kotjewir, and returning to Atinjoe (leaving Mar.  
9), Aimaroe (lakes), Teminaboean, Konda, and  
return to *Sorong*; leaving (Apr. 12) to Jelfio, S of  
*Sorong* (staying about a month); *Sorong*; via  
Solol (Salawati) to *Batanta I.*, Wailibit; *Sorong*,  
leaving June 30 by boat to Manokwari; Ransiki  
and trip into the interior (starting July 13);<sup>4</sup> *Anggi*  
Lakes (*Anggi Gita*), Tombrok, from there (21) to  
*Anggi Gigi* (Serorei), and back to Tombrok and  
October bivouac (1500 m); return to Ransiki, by  
boat to Wandammen and Mici, Manokwari and  
*Sorong* (arriving Oct. 4); to *Batanta I.* (staying 1  
week); *Sorong*, leaving (Nov. 2) for Macassar; by  
K.P.M. steamer via *Bali* to *Java*, short visit to  
Batavia and Buitenzorg; *Singapore* and sailing for  
Göteborg (arriving Jan. 15, 1950).

LITERATURE. (1) Chron. Bot. l.c., is rightly:  
Chron. Nat.



Sketch map showing localities visited in 1948–49, in Ark. f. Zool. 8, no 2, 1955.

(3) Add: Transl. from 'Vildar och Paradisfåglar' (Stockholm 1950; with route map); 'Paradiesische Insel. Urwaldtiere und Steinzeitmenschen in Neuguinea' (Wiesbaden 1956, with map); 'Through primitive New Guinea' (London 1957); 'Mein Vater der Kannibale' (Wiesbaden 1961, with map, transl. from Swedish).

(4) For annotations on the route in the Arfak Mts see W. VINK in Nova Guinea, Bot. 22, 1965, p. 489.

BIOGRAPHICAL DATA. Portr. in 'Vildar och Paradisfåglar' l.c., following p. 192 and 256.

#### Bernard, Charles Jean

(d. 1967, Amsterdam, Netherlands). He was active in several international fields, as Nature Preservation and the Red Cross.

BIOGRAPHICAL DATA. Fl. Mal. Bull. no 22, 1968, p. 1515, 1518.

#### \*Berthe née Friedberg, Claudine

(1933, Paris, France; x), studied in Paris and was subsequently 'Associée au Laboratoire de Botanique Appliquée, Muséum d'Histoire Naturelle'. She visited the Lesser Sunda Islands for ethnological purposes.<sup>1</sup>

COLLECTING LOCALITIES. *Lesser Sunda Islands*. 1962. *Bali* (May–Nov.),<sup>1</sup> at Tenganan, Kintamani, and in the environs of Sanur.—1966. *Timor* (May–Oct.),<sup>2</sup> the central part, both sides of the frontier.

COLLECTIONS. Several hundreds of plants; 1st set in *Lab. Ethnobot. Mus. Nat. Hist. Nat. Paris*; 2nd set *Timor* in *Leyden* and few dupl. from *Bali*; 3rd set in *Lisbon*.

LITERATURE. (1) C. FRIEDBERG: 'Les plantes, les dieux et les hommes dans l'île de Bali' (*Science et Nature* no 59, 1963, 3–12).

C. FRIEDBERG & L. BERTHE: 'Note ethnobotanique sur l'utilisation rituelle de quelques riz balinaï' (*J. Agric. Trop. & Bot. Appl.* 10, 1963, 612–620, 4 pl.).

(2) CL. FRIEDBERG: 'D'après les Bunaq de l'île de Timor. Chasse rituelle brûlis et herbes à savane' (*Science de Nature* no 92, 1969, p. 23–30, 10 fotogr.); 'Analyse de quelques groupements de végétaux comme introduction à l'étude de la classification botanique Bunaq' (*Échanges et Communications offerts à Cl. Lévi-Strauss*, p. 1092–1130, 1 pl.); 'Éléments de botanique Bunaq recueillis à Lamaknen (Timor central)' (*Langues et Techniques Nature et Société II. Approche ethnologique. Approche Naturaliste*. Ed. Klincksieck, p. 375–393, fig. 1–9); 'L'agriculture des Bunaq de Timor et les conditions d'une équilibre avec le milieu' (*Journ. Agr. Trop. & Bot. Appl.* Paris 18, 1971, p. 481–532, map, fotogr.); 'Aperçu sur la classification botanique bunaq (Timor central)' (*Bull. Soc. Bot. Fr.* 118, 1971, p. 255–262, 2 schémas).

#### Beumée, Johan Gotlieb Benjamin

(d. 1966, Bennekom, Gld., Netherlands).

BIOGRAPHICAL DATA. Fl. Mal. Bull. no 21, 1966, p. 1371–1372, 1377.

#### \*Bianchi, Frans

(1918, Buitenzorg, Java), botanist who studied at Amsterdam University. Since Sept. 1946 working in the Hugo de Vries Laboratory, Amsterdam University; taking his Ph.D. on a genetical subject there, and from 1964 Professor of Botany.

COLLECTIONS. In August 1938 he collected some 300 nos on Mt Gedeh-Pangrango in *W. Java*; in *Herb. Univ. Amsterdam*.

#### Billardiére, Jacques Julien Houtou<sup>9</sup> de la

COLLECTIONS. Following up the items in the Cycl. Fl. Mal. I, 1, 1950, p. 57–58 and 599, some additional data on the history of his collections were found in a recently published book<sup>4</sup>. In 1795 the senior surviving French officer, the Chevalier DE ROSSEL, embarked with the collections of the expedition, in a Dutch ship, with the object of placing them at the disposal of Louis XVIII, then titular King of France. This ship was captured by the British Navy off the Shetland Islands, and the collections came into the hands of Sir JOSEPH BANKS. ROSSEL's protest against the seizure of the collections resulted in placing them at the disposal of Louis XVIII, then in Courland. The latter instructed his ambassador to present them to the Queen of England. Later, BILLARDIÈRE's plea with BANKS resulted in the sending of the lot to France.

P. W. WEBB, who had acquired BILLARDIÈRE plants in 1834, in 1837 wrote LAMBERT that he was sending the latter specimens from New Holland, *New Ireland, Java*, and *Amboyna*, collector not named, but evidently BILLARDIÈRE. At LAMBERT's sale 2 bundles of plants from *Java etc.* were bought by R. BROWN (cf. H. S. MILLER in *Taxon* 19, 1970, 529); presumably in *Herb. Brit. Mus.* now.

LITERATURE. (4) Add: Cf. Sir GAVIN DE BEER: 'The Sciences were never at War' (1960) p. 45–68.

(9) Add: The spelling 'HOUTOU' is authentic according to CHEVALIER.

BIOGRAPHICAL DATA. F. A. STAFLEU: 'Adanson, Labillardière, de Candolle, Introductions to four of their books' (in the series *Historiae naturalis classica*, J. Cramer 1967, p. 16–63).

#### Biro, Lajos

COLLECTIONS. Phanerogams and pteridophytes in the *Herb. Gen. Ungarian Nat. Mus.*; identified by Prof. E. GOMBOSZ.

#### \*Bisset, Norman Grainger

(1925, Glasgow, Scotland; x) was educated in chemistry at Imperial College, University of London (M.Sc. organic chem. 1952; Ph.D. 1968). Ahli kimia at the Treub Laboratory, Bogor Botanic Gardens, 1954–58; Colombo Plan expert in chemistry, Malaysia, 1958–62; plant chemist at the C.N.R.S. Institut de Chimie des Substances Naturelles, Gif-sur-Yvette, France, 1962–67; lecturing in pharmacognosy, Dept of Pharmacy, Chelsea College, University of London, since 1967.

In 1964 he carried out a 4 months' mission for the C.N.R.S. collecting dammar samples and plants of potential medicinal interest for chemical studies by various French institutes<sup>1</sup>.

Author of numerous phytochemical papers, recently especially on the genus *Strychnos*.

COLLECTING LOCALITIES. 1956. *S. Moluccas*.<sup>2</sup> With J. VAN BORSSUM WAALKES (itinerary see



there, Suppl. Cycl. Fl. Mal. I, 5, 1958, p. cclxi). *W. Java*: Rantjabadak and Pelabuhan Ratu.—1957. *W. Java*: G. Pulusari, near Menes, Tjipining, Tjipunaga, Tjigarondong.—1960–62. *Malaysia*, occasional coll. mostly of dart-poison plants from various parts.<sup>3</sup>—1964.<sup>1</sup> Many localities in *Sabah* (mostly with W. MEIJER), *Sarawak* (partly with J. A. R. ANDERSON, P. S. ASHTON, and ILIAS PAIE), and *Malaysia* (mostly with KOCHUMMEN).

**COLLECTIONS.** Emphasis on plants of reputed or potential medicinal interest. *S. Moluccan* collections numbered in his personal series (570–748), but also in that of VAN BORSSUM WAALKES or PLEYTE. *W. Java* and *Malaysia* plants (749–783) in BO, K, or L. A few *Malaysian* collections in the KL series. The 1964 collection partly in his personal series (784–808), and also in the KEP, SAN, and SAR institutional series.

**LITERATURE.** (1) Rapport de mission en Extrême-Orient du 9 avril au 6 septembre 1964, pp. 28.

(2) N. G. BISSET: 'A phytochemical survey of some plants from the South Moluccas' (Phytochem. Symp. Kuala Lumpur 1957, p. 125–140).

(3) N. G. BISSET: 'The arrow and dart poisons of South-East Asia with particular reference to the *Strychnos* species in them' (Lloydia 29, 1966, p. 1–18, with M. C. WOODS p. 172–195).

\*Black, Michael

**COLLECTING LOCALITIES.** ? 1965. *New Guinea*.—1968. *Malay Peninsula* and *Java* with P. J. B. WOODS (see there). *New Guinea* with WOMERSLEY, RIDSDALE, and P. J. B. WOODS.

**COLLECTIONS.** *Herb. Edinburgh*.

Blanco, Francisco Manuel

**LITERATURE.** (1) Add: For the drawings of the 3rd ed. of the Flora, see CL. NISSEN, 'Die botanische Buchillustration' 1951, vol. 2, p. 16.

Bland, Laura Shelford

collected as early as 1902 in *Malaya* at Alor Gajah (Aug. 23).

\*Blaxland, G. D., see sub L. H. DENNIS & G. D. BLAXLAND.

Blume, Carl Ludwig

**COLLECTIONS.** Delete: *Herb. Oxford Univ.* Dupl. from *Ambon* (certainly not collected by himself) and *Java* in *Herb. Edinb.*

In 1833 J. FRANK of The Hague, acting as a LAMBERT's agent, sent him a parcel of BLUME's plants from *Java* (cf. Taxon 19, 1970, p. 515). This lot was later bought by PAMPLIN at the sale of L.'s herbarium; subsequent history unknown.

**LITERATURE.** (2) Add: For particulars on the drawings of his publications see CL. NISSEN, 'Die botanische Buchillustration' 1951, vol. 2, p. 17.

Boedijn, Karel Bernhard

(d. 1964, The Hague, Netherlands).

**BIOGRAPHICAL DATA.** Vakbl. Biol. 44, 1964, p. 191; Persoonia 3, 1965, p. 325–330, pl. 4, bibliogr.; Fl. Mal. Bull. no 20, 1965, p. 1237.

\*Bogle, A. Linn

Ph.D. Minnesota; Field Research Assistant to

Prof. ABBE (see there). In Asia he was accompanied by his wife (M. P. BOGLE) at her own expense, except for the Kinabalu trip, for which NSF paid her expenses as well.

**COLLECTING LOCALITIES.** 1961. India (Sept. 21–Oct. 6; Oct. 31–Dec. 12), Burma (Dec. 18–21).—1962. *Malaya*: Cameron Highlands (Jan. 13); *Sabah*: Mt. Kinabalu (Feb. 2–23) with ABBE, KAUL, and W. MEIJER.

**COLLECTIONS.** Dupl. in *Herb. Edinb.*; main collection probably in *Minnesota*. Primarily *Fagaceae* for Prof. ABBE were collected, but also material for a thesis.

\*Bojeng bin Sitam, see Forest Dept Sarawak.

Boorsma, Simon Eliza

(d. 1959, Amsterdam, Netherlands).

Boorsma, Willem Gerbrand

**BIOGRAPHICAL DATA.** Add: Pharm. Tijdschr. N. I. 1, 1924, p. 137; Pharm. Wkbl. Ned. 74, 1937, p. 331; Voeding 27, 1966, p. 167–170, portr.

Booth, H. or J.

As yet there is no certainty on the *Java* collector of that name. See also sub J. TH. BOOTH.

A certain JOHN BOOTH of the Flottbecker Baumschulen (= nursery) near Hamburg, Germany, built a new orchid house in 1844 (Bot. Zeit. 3, 1845, p. 48). In 1850 a catalogue of the firm of JAMES BOOTH & Söhne offered many orchids for sale (Bot. Zeit. 9, 1851, p. 240). In 1861/62 the orchid collection of the firm was sold to England and they started growing water plants (Hamb. Gart. Blum. Zeitschr. 18, 1862, p. 433–436). Possibly a son of the family collected in *Java* for somebody in England.

\*Booth, Jonas Thomas

(b. 1829; d. ?), who preferred to be known as THOMAS J. BOOTH, was a nephew of THOMAS NUTTALL. He shared his uncle's enthusiasm for travel and made botanical collections for the latter in N. Assam,<sup>1</sup> having sailed from Liverpool for Calcutta in June 1849. In 1853 NUTTALL (and BOOTH) described 22 new *Rhododendron* species from there.

From a letter to the Gardeners Chronicle,<sup>2</sup> written several years later, it is apparent from the signature, that BOOTH at that time was living at Rainhill Nursery, near Prescot.

It might be possible that the unknown BOOTH who collected in *Java* in 1862 (see Cycl. Fl. Mal. I, 1, 1950, 72a), was identical or a relation.

**LITERATURE.** (1) Cf. Trans. Bot. Soc. Edinb. 41, 1972, p. 351–363.

(2) Cf. Gard. Chron. 1862, p. 406.

\*Borgman S. V. D., Father Ernst

Alexishafen; a student of the Max Planck Inst. für Züchtungsforschung at Cologne, spent several months in the Eastern and Western Highlands, Territory of New Guinea, collecting herbarium specimens and the corresponding cytological material.<sup>1</sup>

**COLLECTING LOCALITIES.** 1960. *Territory of New Guinea*: 4 weeks on the E. slope of Mt Wilhelm in the alpine zone, and again in Sept. and Nov.,

climbing the summit (4700 m) three times; other collections in the Upper Chimbu Valley between Mogl (near Kundiawa) and Denglagu, above Keglsugl airfield up to Komanemambuno (the Pengagl River camp of 1959 Archbold Exp.) and in the Middle and Upper Wahgi River valley (Mt Hagen, Fatima, Banz, Nondugl, Minj, Mingende, Kondiu, Nera Gaima).

COLLECTIONS. 454 nos, in *Herb. Lae*, *Herb. Leyden*, and ? *Edinb.* (as E. BERGMAN).

LITERATURE. (1) Author of: 'Anteil der Polyploidien in der Flora des Bismarckgebirges von Ostneuguinea' (*Zeit. Bot.* 52, 1964, p. 118-172, 1 map, 21 fig.).

**Borssum Waalkes**, Jan van

took his Ph.D. at Leyden University in 1966. Horticultural Taxonomist, Botanic Gardens, Groningen University.

COLLECTIONS. Correction: Only *Fungi* destroyed.

**\*Borst**

Possibly a contemporary medical colleague of BLUME.

COLLECTIONS. A specimen 'O. Indien BORST' is preserved in *Herb. Leyden*. The label (of *Lindernia anagallis* (BURM. f.) PENNELL) was written by C. L. BLUME.

**Boswezen Nieuw Guinea**

To the collectors in the BW series add: Ir P. J. FABER (Kebbar), Ir M. FLACH (Lake Jamur; Fak-Fak), R. F. HULSKAMP (Fak-Fak), H. LORENZO, Ir J. LUITJES (Manokwari; Arfak), B. MAHUZE (Arguni Bay), MOMOT (Manokwari), C. M. MORTIER (Manokwari; Biak), A. NUSI (Manokwari; Kebbar), H. J. VAN PETERSEN (*Japen*; Manokwari), CH. RIEKERK (Kebbar; *Biak*), H. C. J. ROEBY (Kebbar; Manokwari), F. SAURWALT (Wildeman River), W. E. F. SIEBENHAAR (Fak-Fak; Arguni Bay), A. W. TELUSSA (Arguni Bay), R. VERSTEEGH (Kebbar; Manokwari; Ransiki; Sarmi), H. WARENT (Kokonao), L. WOROBAL (Manokwari).

The collector C. LUGTMEYER (Suppl. Cycl. Fl. Mal. I, 5, 1958, p. cclxii) rightly has the initials H. W.

**Bouillenne**, Raymond

(d. 1971 or early 1972).

**\*Bowers**, Miss Nancy

American anthropologist, educated at Columbia University (B.S., Ph.D.), Assistant Professor of Anthropology, Duke University, Durham, North Carolina, U.S.A. She made expeditions to Australian New Guinea to investigate traditional and changing agricultural patterns; subsequently (1969) Visiting Research Fellow, Austr. National University.

COLLECTING LOCALITIES. 1963-. She visited Western and Southern Highlands of *Australian New Guinea*, collecting almost all plants in Upper Kaugel Valley (W. Highlands), but some items from Upper Mendi (S. Highlands Distr.), Porgera (W. Highlands Distr.), and Kandep (W. Highlands Distr.).

COLLECTIONS. *Herb. Lae*: nos 1-807; dupl. eventually in *Canberra, Wash. U.S. Nat. Mus.*,

*Kew*, and *Brisbane*. Dupl. of *Pandanaceae* to the *B. P. Bish. Mus. Hawaii* (Dr St. JOHN), and to Dr B. C. STONE, *Herb. Univ. Malaya Kuala Lumpur*.

**Boxall**, Richard

COLLECTING LOCALITIES. Add: In 1891 *Philippines*: in *Samar* and *Mindanao*.

**Braat**, Christoph George Sigismund

(d. 1891, Velp, Gld., Netherlands).

**\*Brand**, D., see Forest Dept North Borneo.

**\*Brandes**, Elmer Walker

(1891, Washington, D.C., U.S.A.; x), plant pathologist, educated at Michigan State College (B.S. 1913, M.S. 1915); student at Cornell University (1916-17), and Ph.D. University of Michigan (1919). Up to 1959 he made an impressive career in sugar-plant investigations, mainly of the Dept of Agriculture in Washington. Many were the honours bestowed on him.

He was sponsored by the said Agricultural Department to collect sugar-cane varieties in Australian New Guinea, together with JESWIET (see Cycl. Fl. Mal. I, 1, 1950) and PEMBERTON (see this Suppl.). In total 292 varieties were brought home.<sup>1</sup>

COLLECTING LOCALITIES. 1928. *E. New Guinea*: Fly River, Palmer R., Ok-Tedi R., Strickland R., Lake Murray, Port Moresby, Rigo, Sepik R., Lae.

COLLECTIONS. JESWIET brought back many herbarium specimens, but whether the other members did, is not known to me.

LITERATURE. (1) *Cf. Hawaiian Plant. Rec.* 55, 1958, p. 213; E. W. BRANDES: 'Into primeval Papua by seaplane' (*Nat. Geogr. Mag.* 56, 1929, p. 253-332, ill.); 'Cane Growers' Quart. Bull. Brisbane 15, 1951, p. 41-42.

BIOGRAPHICAL DATA. Who was who in America 1961-68, vol. 4; Amer. Men of Science, Phys. & Biol. Vol., ed. 10.

**Brass**, Leonard John

(d. 1971, Cairns, Australia), was awarded a honorary Dr's degree from Florida University in 1962.

In May 1966 he retired from the Archbold Expeditions and Museums and settled in Australia, where he was offered a honorary curatorship of the Herbarium of the North Queensland Naturalist's Club at Cairns.

ITINERARY. Add: 5th ARCHBOLD Expedition, 1956.<sup>10</sup> — 6th ARCHBOLD Expedition, 1959.<sup>11</sup> From Lae to summit Mt Kaindi (Mar. 25-May 28); to Mt Wilhelm (15,000 ft) (June 6-Aug. 1); Mt Otto from Kotuni on the S. slopes, Mt Michael, Purosa in the Okapa region; Kratke Mts with ascent to Mt Elandora (8500 ft) (Aug. 2-Nov. 9); Upper Markham Valley (Nov. 9-29).

COLLECTIONS.<sup>12</sup> Exp. 1959 in *U.S. Nat. Herb.*: 3622 nos incl. 342 cellular crypt.; dupl. will be distributed in the future. Moss dupl. in *Herb. Bartram, Farlow*.

LITERATURE. (9) Add: Mosses by E. B. BARTRAM in *Brittonia* 9, 1957, p. 32-56.

(10) L. J. BRASS: 'Results of the Archbold Expeditions no. 79'. 'Summary of the fifth Archbold Expedition to New Guinea, 1956-1957' (*Bull.*

Am. Mus. Nat. Hist. 118, 1959, p. 1-70, 1 map, 8 photogr.).

*Mosses* by E. B. BARTRAM in *Blumea* 10, 1960, p. 142-150.

(11) *Cf.* extensive data in *Fl. Mal. Bull. no 15*, 1960, p. 717-718.

L. J. BRASS: 'Results of the Archbold Expeditions no. 86'. 'Summary of the sixth Archbold Expedition to New Guinea, 1959' (*Bull. Am. Mus. Nat. Hist.* 127, 1964, p. 145-216, map, photogr.).

(12) For a complete comprehensive list, see *Fl. Mal. Bull. no 21*, 1966, p. 1422-1425.

BIOGRAPHICAL DATA. *J. Arn. Arb.* 52, 1971, p. 695-698, portr.

**\*Bray, P. S.**

a British graduate volunteer under the Voluntary Service Overseas Programme; he graduated in 1968 with an external London degree in botany from Portsmouth Technical College. At present (1969) selling computers. Attached to the Forest Department Kepong from Sept. 1968-Mar. 1969. He occasionally collected in the series of the Forest Research Institute with P. F. COCKBURN and maybe others in Malaya.

**Breda de Haan, J. van**

(d. 1917).

BIOGRAPHICAL DATA. *Teysmannia* 28, 1917, 1 p. in suppl. obit. announcement.

**\*Bridg(e)land, Leon**

an Agricultural Consultant Officer at Rabaul, Bismarck Islands, who made a small collection of plants in association with a Nutrition Survey Group.

COLLECTIONS. At least in 1947 in the Territory of New Guinea. Numbered in the NGF series; *Herb. Lae*.

**Broekx, W. Ch. L.**

(d. c. 1973, Arnhem, Netherlands).

**\*Broekhuijsen, Dr H. O.**

= probably Gerrit Jeronoimo BROEKHUYSEN (1908, Java; x), zoologist who studied biology at Leyden University (1929-33); Ph.D. 1936. From 1937-39 at the University Capetown; entomologist at Pretoria, 1939-41; freshwater biologist Java, 1941-46; at present in the Dept of Zoology University Capetown, Randebosch, S. Africa.

Numerous zoological, especially ornithological publications.

COLLECTIONS. He evidently collected some grasses for Dr H. C. D. DE WIT during the Japanese occupation of Java (at least on 28-10-2603, Jap. chronology); in *Herb. Bog*.

**Brongersma, Leo Daniel**

Suppl. Cycl. Fl. Mal. I, 5, 1958, p. cclxiv add: The Star Mountains Expedition took place in 1959 (see under C. KALKMAN, B. O. VAN ZANTEN, and J. J. F. E. DE WILDE).

**Brooke, Winifred Mary Adelaide**

COLLECTIONS. Also dupl. in *Herb. Edinb.*

**Brouwer, H. A.**

(see Cycl. Fl. Mal. I, 1, 1950) is HENDRIK

ALDERT BROUWER (1886, Medemblik, Netherlands; 1973, Amsterdam) who worked with the Dept of Mining in the D.E.I. from 1910-17; Professor of Geology at Delft 1918-29, and at Amsterdam University 1929-57. After his retirement he still lived in Amsterdam.

Author of numerous books and papers, mainly of the geology of the former Dutch East Indies.

BIOGRAPHICAL DATA. *World Who's Who in Science* 1968.

**Brown, Robert**

COLLECTIONS. Add: Extensive data on collecting localities in Australia, key to the letters and numbers used in the 'Prodromus', etc., are to be found in STEARN's Introduction.<sup>1</sup>

LITERATURE. (1) Add: 'The Prodromus' (1810) and 'Supplementum primum' (1830) were reprinted (facsimile 1960) with an Introduction by W. T. STEARN.

(2) Add: For particulars on the drawings see CL. NISSEN, 'Die botanische Buchillustration' 1951, vol. 2, p. 61 *sub* FLINDERS.

BIOGRAPHICAL DATA. *Austr. J. Sc.* 21, 1958, p. 127-130; in W. T. STEARN, 'Introduction to R. Brown Prodromus etc.' (facs. 1960) p. v-lii, portr.

**Browne, Francis George**

left Borneo about 1959 and accepted a post in charge of the West African Timber Borer Research Unit. He later repatriated.

**\*BRUN nos, see Forest Department Brunei.**

**Brunig, Eberhard Friedrich (Wilhelm Otto)**

Add: In 1964 he lived in Hamburg, Germany, working on a thesis on Kerangas vegetation.

Author of several papers on the vegetation of Sarawak.<sup>1</sup>

COLLECTING LOCALITIES. Add: Merurong Plateau.<sup>1</sup>

LITERATURE. (1) A.o. 'The Merurong Plateau' (*Borneo Terr. For. Bull.* 1, 1959, p. 1-9); 'A Guide and Introduction to the Vegetation of the Kerangas Forests and the Padangs of the Bako National Park, Sarawak' (*Symp. Ecol. Res. Humid Trop. Veget.* Kuching 1963, 1965, p. 289-318, 1 fig., 1 map, 2 tab.); 'Some observations on the status of Heath Forests in Sarawak and Brunei' (*Proc. Symp. Recent Adv. Trop. Ecol.* Varanasi 2, 1968, p. 451-457, 4 fig., 3 tab.); 'Der Heidewald von Sarawak und Brunei' (*Mitt. Bundesforsch. f. Forst- u. Holzwirtsch. Reinbek bei Hamburg no 68*, Sept. 1968, 431 pp., roneo, with fig., maps, etc.); 'The Classification of Forest Types in Sarawak' (*Mal. For.* 32, 1969, p. 143-179, 7 fig., 2 tab.); etc.

**\*Brunson, L. W.**

collected some plants together with W. H. LAMBERT (see Cycl. Fl. Mal. I, 1, 1950) in 1945; probably during military expeditions.

**Buchanan, Francis, cf. HAMILTON, F. BUCHANAN** in *Cycl. Fl. Mal. I*, 1, 1950 and *Suppl. Cycl. Fl. Mal. I*, 5, 1958.

**\*Buderus, J.**

collected together with D. G. FRODIN (see there).

**\*Bürger, Heinrich**

(1804 or 1806, Hameln on the Weser, Hanover, Germany; 1858, Indramaju, Java). Of his education not much is known with certainty, but it seems that he was, from 1821, a student in mathematics at Göttingen University. He used the doctor's title. In 1823 he went to Holland and sailed for Java to be appointed apprentice pharmacist in the hospital at Weltevreden. In 1825 he was, at his own request, put at the disposal of the surgeon-major Ph. F. von Siebold in Deshima, the Dutch settlement in Japan. In 1828 he took over part of Von Siebold's function and up to 1835 he sent large zoological<sup>1</sup> and botanical collections from Japan to Leyden. He was commissioned to Java in 1832, and in 1833 joined an expedition of the 'Natuurkundige Commissie' to the Padang Uplands (see P. W. Korthals) as a mineralogist.<sup>2</sup> He was pensioned in 1843, and returned to Java as a private citizen; there, his business interests lay in many fields. In 1854 J. Motley (see there) was his guest in Batavia.

Especially Miquel has named many Japanese plants in his honour.

**COLLECTIONS.** Japanese plants in *Herb. Leyden* and in several other herbaria. It seems probable that he is the 'BURGER' (see Cycl. Fl. Mal. I, 1, 1950, p. 91) who sent botanical material (presumably from Java) to Blume, as his name was often written in that way. Dr Leenhouts of the Rijksherbarium remembers to have seen *Sumatra* specimens of the Blume herbarium with a 'B' at the left upper corner of the label, which by exclusion he inferred to be Bürger specimens.

**LITERATURE.** (1) Cf. L. B. Holthuis in 'Early European Investigations on Japanese Carcinology (1640-1854)' (Study of Mollusca no 3, 1967, p. 15-20) and L. B. Holthuis & T. Sakai: 'Ph.F. von Siebold and Fauna Japonica. A history of early Japanese Zoology' 1970, p. 37-42.

(2) H. Bürger, Phil. Dr.: 'Aanteekeningen op een reize door een gedeelte der Noord-Westkust van Sumatra, . . . in het jaar 1833. Etc.' (Verh. Bat. Gen. K. & W. 16, 1836, (159)-(226)).

**BIOGRAPHICAL DATA.** *Blumea* 11, 1962, p. 495-505.

**Büsgen, Moritz**

**COLLECTING LOCALITIES.** Add: In *Central Java* also at: Tudir, Wonosemi, Ngliron, Gundih.

**\*Bujang, Hj.,** see Forest Dept Sarawak.

**\*Bulmer, Ralph Neville Hermon**

(1928, Hereford, England; x), anthropologist, B.A. at Cambridge (1952), Ph.D. of the Australian National University, Canberra (1961); Research Scholar, Austr. Nat. Univ. (1954-57); Lecturer/Senior Lecturer in Social Anthropology University of Auckland, New Zealand (1958-67); Professor of Social Anthropology, University of Papua and New Guinea, Port Moresby (1968- ). Author of anthropological papers<sup>1</sup>.

**COLLECTING LOCALITIES.** *Eastern half of New Guinea* in Western Highlands District: Baiyer Valley (Aug. 1959-60); Kaironk Valley, Schrader Range (intermittently from Aug. 1963 to 1968 at least).<sup>1</sup>

**COLLECTIONS.** *Herb. Lae*: approx. 350 nos; two dupl. of most numbers in *Auckl. War Mem. Mus.*, New Zealand.

**LITERATURE.** (1) R. N. H. Bulmer: 'Edible Seeds and Prehistoric Stone Mortars in the Highlands of East New Guinea' (Man 64, 1964, Art. 183, p. 147-150); 'Why is the Cassowary not a Bird? Zoological Taxonomy among the Karam of New Guinea Highlands' (Man n.s. 2, 1967, p. 5-25; includes general account of field work in the Kaironk Valley region, Schrader Range).

**BIOGRAPHICAL DATA.** In *New Zealand Who's Who*, and *Who's Who in Australia*.

**\*Buntar, A.,** see Forest Dept North Borneo.

**Burbidge, Frederick William**

**COLLECTIONS.** Dupl. from *N. Borneo* and the *Philippines* in *Herb. Edinb.* also.

**Burcham, Levi Turner**

Add: **BIOGRAPHICAL DATA.** Portr. in *HAT-USIMA*, *Flora Ryukyus* 1971, p. 75.

**Burchard, E. W.**

? identical with W. F. G. Burchard (see there).

**COLLECTIONS.** Dupl. (ROSENSTOCK exsicc.) from *Sumatra* (1907) in *Herb. Edinb.*

**Burger, see H. BÜRGER.**

**\*Burgess, Peter Frederick**

(1925, Hertford, England; x), B.Sc. For. University College North Wales, and Dept For. of St. Johns College Oxford; Malayan Forest Service 1946-1956; Deputy Conservator, N. Borneo and Sabah 1956-1965; Colombo Plan Silvicultural Ecologist, Forest Research Institute Kepong, Malaysia, 1967- .

Author of papers in the *Malayan Forester*, the *Malayan Nature Journal*, and of a book 'The Timbers of Sabah'.

**COLLECTING LOCALITIES.** With P. F. Cockburn (see there) on G. Tapis, Pahang (Sept. 3-14, 1968).<sup>1</sup> Main collecting areas: East Coast of Sabah, Ranau (Sabah); *Malay Peninsula*: G. Inas, G. Tapis, G. Stong, G. Pulau and Bt Jelakoi (Johore), Lepar and Gua Peningat (limestone hill) in Pahang.

**COLLECTIONS.** *Herb. Kepong* and *Sandakan*. Dupl. at *Kew* and *Leyden*. Collections in West Malaysia mostly for ecological purposes.

**LITERATURE.** (1) P. F. Burgess: 'An ecological study of the hill forests of the Malay Peninsula' (Mal. For. 31, 1968, p. 314-325).

**Burkill, Humphrey Morrison**

retired mid-1969; he has now joined the Kew staff under the Bentham-Moxon Trust to revise DALZIEL's 'Useful Plants of West Africa'.

**COLLECTING LOCALITIES.** Add: 1957. *P. Satuma, P. Senang, etc.* (Jan. 30-Feb. 3, Aug. 2-6); Malacca (Apr. 19-20), Fraser's Hill (Apr. 30-May 4); Thailand, Kanburi Prov. (Nov. 25-27).—1958. *P. Satuma, P. Senang, etc.* (Feb. 15-19).—1959. Johore (June 21-29, July 13-24); Fraser's Hill, Pahang (Aug. 25-29) with M. SHAH and M. NUR BIN JUMA(A.T.).—1962. *Malaya, Singapore, and Java*, mainly collecting *Algae*.—1966. *Sarawak*, Mersing, Tk. Sari (Jan. 1-3); *Malaya: P. Pemang-gil*, Johore (July 4-10).

Certainly at many other places during his stay in Singapore.

**COLLECTIONS.**<sup>1</sup> Add: Dupl. in *Herb. Edinb.* (acq. 1960).

**LITERATURE.** (1) J. H. KERN: 'Juncaceae, a new family record for Malaya' (*Gard. Bull. Sing.* 17, 1958, p. 91-92).

**Burkill, Isaac Henry**

(d. 1965, Leatherhead, Surrey, England).

**BIOGRAPHICAL DATA.** Add: *Gard. Bull. Sing.* 17, 1960, p. 341-349, photogr., partial bibliogr.; *ibid.* p. 350-356; *Nature* 206, 1965, p. 871; *Gard. Bull. Sing.* 22, 1967, p. 67-105, incl. bibliogr. and list of taxa (proposed, and named after him); *Ass. Trop. Biol. Bull.* no 7, 1966, p. 52.

**Burret, Carl Ewald Max**

(d. 1964, Berlin, Germany).

**BIOGRAPHICAL DATA.** *Principes* 2, 1958, p. 87-91; *Willdenowia* 2, 1959, p. 140-142, portr.; *ibid.* 4, 1965, p. 23-31, 1 Abb., bibliogr., portr.

**\*Burt, Brian Laurence**

(1913, Claygate, Surrey, England; x), botanist, B.Sc. London (1936); on the staff of the Royal Botanic Gardens, Kew (1930-51, interrupted by war service 1940-46); at present Principal Scientific Officer Royal Botanic Garden, Edinburgh. Monographer of *Gesneriaceae*.<sup>1</sup> He visited the Malayan region (see below), Pakistan (1958), South Africa (1965, 1966), and Malawi (1967).

**ITINERARY.** 1962,<sup>2</sup> with P. J. B. WOODS (see there). *Malay Peninsula:* Kuala Lumpur (Apr. 14), Ipoh (19), Perlis (23), *Langkawi Is.* (Apr. 28-May 3); *Sarawak:* Kuching area (May 15), Niah caves (June 3), Marudi (10), G. Mulu and Sg. Melinau (12), Lambir Hills (July 4), Kuching area (13), Kapit area (Wong Pelagus on Rejang and S. Bena: July 19), Kuching area and G. Gaharu (30), Lundu distr. G. Gading (Aug. 5); Poi Range, G. Berumput (Aug. 8-17).—1967, with A. M. MARTIN. *Sarawak* (July-Oct.):<sup>3</sup> Kuching area (July 22-26), Hose Mts (Aug. 2-27), Kuching area (Sept. 7-14); in the 5th Division from Long Semadoh to Bakelakan, G. Murud and return (Sept. 20-Oct. 18).

**COLLECTIONS.** In *Herb. Edinb.*: nos BURT 1603-1823 (*Malay Penins.* 1962), 1825-2901 (*Sarawak* 1962),<sup>4</sup> 4700-5577 (*Sarawak* 1967); dupl. in *Herb. Sarawak*. Primary objectives of collecting were *Gesneriaceae* and *Zingiberaceae*, partly for cultivation.

**LITERATURE.** (1) Author of 'Studies in the Gesneriaceae of the Old World' in *Notes R. Bot. Gard. Edinb.*

(2) 'Report on B. L. Burt Gesneriad Hunting Expedition' (*Gloxinian* 12, 1962, p. 77-79, 1 map) (*n.v.*); cf. also map in *Notes R. Bot. Gard. Edinb.* 29, 1969, p. 142.

(3) Cf. Mimeogr. internal report: 'Expedition to Sarawak, 1967' (B. L. BURT & A. M. MARTIN), and map in *Notes R. Bot. Gard. Edinb.* 29, 1969, p. 142.

(4) B. L. BURT & R. M. SMITH: 'A new species of Zingiberaceae from Sarawak' (*Trans. Bot. Soc. Edinb.* 39, 1964, p. 502-511); 'A new genus of Acanthaceae from Sarawak' (*Notes R. Bot. Gard.*

*Edinb.* 26, 1965, p. 325-329); 'Cosmianthemum: a Bornean genus of Acanthaceae' (*l.c.* p. 365-382).

B. L. BURT: 'Sarawak Plants'. I (*ibid.* 29, 1969, p. 141-155, f. 1-6, pl. 5-6); 'Studies in the Gesneriaceae of the Old World XXXIII. Some species of *Cyrtandra*, chiefly Bornean' (*ibid.* 30, 1970, p. 23-42, 1 fig.).



BURT

**Butterworth, W. J.**

**BIOGRAPHICAL DATA.** Portr. in *Str. Times Annual* for 1971, p. 60.

\*Buwaya, see sub H. C. CONKLIN.

Buyzman, Maarten, was erroneously written Buisman in *Suppl. Cycl. Fl. Mal.* I, 5, 1958.

**\*Buzacott, James Hardie**

(1902, Brisbane, Queensland, Australia; x) was educated in the University of Queensland (B.S. 1933, M.S. 1938). From 1925-47 Entomologist, Queensland Bureau of Sugar Experiment Stations; subsequently Senior Plant Breeder with the same organization.

He published extensively on cane breeding and entomology.

In 1951 he and C. G. HUGHES (see there) were sponsored by the Queensland Bureau of Sugar Experiment Stations to collect cane varieties in *Australian New Guinea*.<sup>1</sup> They were accompanied by J. N. WARNER as a representative of the Hawaiian Sugar Planters' Association.

**COLLECTING LOCALITIES.**<sup>2</sup> 1951. *E. New Guinea:* Port Moresby (Apr. 17-21), Lae, Markham R., Kainantutu, Aiyura, Goroka, Chimbu, Mt Hagen, Mendi, Laloki, Sogeri. Leaving New Guinea by plane from Port Moresby on June 3.

**COLLECTIONS.** 165 varieties of cane (*Saccharum* and *Erianthus* mainly) were collected and herbarium specimens might be in existence.

**LITERATURE.** (1) J. H. BUZACOTT & C. G. HUGHES: 'The 1951 Cane Collecting Expedition to New Guinea' (Queensl. Bur. Sugar Exp. Stat., Cane Growers' Quart. Bull. 15, 1951, p. 35-72).

(2) Cf. Hawaiian Plant. Rec. 55, 1958, p. 213; Cane Growers' Quart. Bull. 15, 1951, p. 43-54.

**BIOGRAPHICAL DATA.** In Bibl. Austr. Entom. 1775-1930 (R. Zool. Soc. N.S.W. 1932, p. 32).

**BW nos**, see Boswezen Nieuw Guinea.

**Campbell, Charles**

Add: His botanical MSS possibly came into the hands of J. ARNOLD (see J. BASTIN in J. Soc. Bibliogr. Nat. Hist. 6, 1973, p. 365 (note 245)), but probably were lost with the fire on the 'Fame' (see RAFFLES).

**\*Canright, James Edward**

(1920, Delaware, Ohio, U.S.A.; x), botanist educated at Miami University (Oxford, Ohio), and Harvard University (Ph.D. 1949); Teaching Fellow in Botany, Harvard Univ., 1946-49; Associate Professor, Department of Botany, Indiana University, Bloomington, U.S.A., 1949-. With the assistance of a Guggenheim Fellowship he spent five months in a guest house in Kebun Raya, Bogor, Java; subsequently he worked for about the same time at the Herbarium of the Singapore Botanic Garden.

**COLLECTING LOCALITIES.** Sept. 1960-Feb. 1961 in *W. Java*: Gardens at Bogor and Tjibodas, and a few plants from Udjong Kulon Nature Reserve; throughout *Malaya*, in Johore: G. Pulai (Mar. 2, 8, 24); G. Pantu (Mar. 4, 12); Sg Dohal and Sg. Kayu swamp forests (Apr. 21); Mersing to Endau (Apr. 24); Kukup region, Pontian Distr. (May 5); Kota Tinggi to Kg. Sedili Besar (May 19, June 23); during trip in Malacca, Negri Sembilan, Pahang (Fraser's Hill), Perak (chiefly on Maxwell Hill), *Penang*, and Selangor (June 9-17); numerous *Singapore* collections from Botanic Gardens, Bukit Timah, Labrador Reserve, MacRitchie Reservoir Reserve, Mandai Rd Distr., and Seletar Reservoir Reserve.

**COLLECTIONS.** About 350 *nos* from above-mentioned localities, including much preserved material. Dupl. of most ranalean specimens from Kebun Raya Bogor in *Herb. Bog.*; *Myristicaceae* deposited in *Herb. Un. Cincinnati*; other Malaysian collections not yet distributed. His collections will eventually be deposited in the *Indiana Un. Herb.*

**BIOGRAPHICAL DATA.** Amer. Men of Sc. ed. 9 and 10; Who's who in America 1961.

**Cantor, Theodore Edward**

See *sub* WHITE (Cycl. Fl. Mal. I, 1, 1950) (1809, Copenhagen, Denmark; d. 1854), M.D. Halle 1833, entered the uncovenanted Bengal Medical Service in 1835, and from 1837-38 worked as a surgeon to the Bengal Marine Survey. He volunteered as Assistant Surgeon to one of the regiments despatched to China (Opium Wars!) by the E.I.C. and stayed in Chusan from July 1840-Mar. 1841, making zoological<sup>1</sup> and botanical collections (partly a failure because of ineffective preservatives)

and numerous sketches of plants *etc.* which are still in the India Office Library.<sup>2</sup>

Later he served in Malaya, and was in Penang in 1844.

*Bambusa cantori* MUNRO was named in his honour.

**COLLECTIONS.** Doubtful whether any Malayan plant collections exist.

**LITERATURE.** (1) Author of 'The Zoology of Chusan' (Calcutta 1842) and several zoological papers.

(2) Cf. M. ARCHER in 'Natural History Drawings in the India Office Library' (London 1962) p. 51-53, 76.

**BIOGRAPHICAL DATA.** Biogr. Index BRITTEN & BOULGER 2nd ed. by RENDLE, 1931.

**\*Carlquist, Dr Sherwin**

Associate Professor of Botany at Claremont University, and anatomist-palynologist-phylogenist of the Rancho Santa Ana Botanic Gardens, California.

In 1962 he travelled 14 months in the Pacific (incl. Society Is. and New Guinea) and had plans to do further collecting in tropical Queensland, and Indonesia, financed by a National Science Foundation Grant.

He wrote a book on natural history, based upon his trip and research.<sup>1</sup>

**ITINERARY.** *Terr. of New Guinea.* In 1963 he accompanied P. VAN ROYEN (see there) on a trip from Lae to Rawlinson Range and Saruwaket (Feb. 20-Mar. 3); Mt Piora, 3719 m, W of Lae with E. HENTY *etc.* (Mar. 9-13).

**COLLECTIONS.** 850 *nos* of dried and pickled material, particularly of *Scaevola*, *Stylidiaceae*, *etc.*

**LITERATURE.** (1) S. CARLQUIST: 'Island Life' (New York 1965).

**\*Carne, M. A. & C. Baker**

**ITINERARY.**<sup>1</sup> *2nd Colonial Sugar Refining Co. (of Australia) Expedition in SE. New Guinea. 1914.* Setting out from Buna (May 31) and collecting in the country lying west of Buna down to the northern slopes of the Hydrographers Range and as far north as the Kumusi R.; after 6 weeks return to Buna, setting out again on July 22, and during the 2nd trip collecting behind the Hydrographers Range on the Bariji R., behind Oro Bay and NW in the Koenia and Mambare R. district; leaving Buna (Aug. 19), proceeding along the Kokoda Trail to Port Moresby.

**COLLECTIONS.** 106 varieties of sugar-cane. Some varieties may be represented in herbaria.

**LITERATURE.** (1) Cf. Hawaiian Plant. Rec. 55, 1958, p. 213; Cane Growers' Quart. Bull. 15, 1951, p. 40.

**\*Carocci-Buzi, V. P.**

collected in Hort. Bot. Bogor. in 1957. Material in *Herb. Bog.*; dupl. in other herbaria.

**\*Carolyn**, see Philippine National Herbarium.

**Carr, Cedric Er(rol)**

**COLLECTING LOCALITIES.** Details mentioned under 1935-36. *SE. New Guinea* (Cycl. Fl. Mal. I,



1, 1950) substitute by:<sup>5</sup> *Centr. Division*: from Jan.–Aug. 1935 in the lowland country around and to the NW. of Port Moresby, mainly at Kanosia (Jan., Feb., Apr.), Veiya (Mar.), Rouna (1300 ft, Apr.–July), and Koitaki (1500 ft, Apr.–July); towards the Owen Stanley Range (Aug. 16) via Hailogo (3000 ft, Aug. 31–Sept. 4), the S. slopes of the Range, camping at Boridi (4700 ft) (Sept.–Dec.); *Northern Division*: leaving Boridi (Dec. 3), camp at 6000 ft near Alola on the N. side of the Range, Lala River (5500 ft, up to early Jan. 1936); subsidiary camp nearer the Gap (8000 ft), collecting up to 10,000 ft (Jan. 12–30); down to Isuarava (3500–4500 ft), Lala River and Yodda River below Isuarava at 3500 ft (Jan. 31–Mar. 15), at Kokoda (1200 ft, Mar. 17–May 23), Fara River (May 24). Besides there are a few numbers from Saputa (200 ft), Inapa (500 ft), and Buna (sea-level) (Apr. 5–8, 1936), either collected by CARR himself en route or by native collectors.

He never reached Mt Victoria.

**COLLECTIONS.** Add: The remainder of his 1935–36 *New Guinea* collection was shipped from Singapore to the British Museum in 1954–55, and has since been distributed to the recipients of CARR's sets. With it were 600 gatherings of orchids with minute field tickets, but unnumbered, evidently some of the last plants gathered before his death, or cultivated at camps. The latter were numbered (between 16,600–17,232) in the B.M. and have been distributed. Besides in the already mentioned herbaria, a few numbers are at *Lae, Tucuman, Geneva, and Arn. Arbor.*<sup>6</sup>

Dupl. from *Borneo* (1933) and *New Guinea* (1935–36) in *Herb. Edinb.*

**LITERATURE.** Add: (5) Cf. E. W. GROVES in *Fl. Mal. Bull.* no 16, 1961, p. 826–827.

(6) Cf. E. W. GROVES in *Fl. Mal. Bull.* no 15, 1960, p. 719; *ibid.* no 16, 1961, p. 826–827.

#### \*Carrick, John

(1914, Glasgow, Scotland; x) was educated in the University of Glasgow (B.Sc. 1938); 1940–46 in Military Service, from 1943 onwards in India; 1946–51 Lecturer in Mycology and Plant Pathology at the University of Manitoba, Winnipeg, Canada; from 1952 Lecturer in Plant Physiology at the University of Malaya, Singapore and Kuala Lumpur; Senior Lecturer since 1960. His appointment as Field Pharmacognosist (Colombo Plan) terminated end 1967. In 1968 he moved to Adelaide, S. Australia. Liaison Officer at Kew in Apr. 1970.

Plant collections have been made in connection with a physiological-ecological study of lowland kerangas vegetation and soil.

**COLLECTING LOCALITIES.** 1959. *NW. Borneo*, Sarawak: Bako National Park (Apr. 18–May 11), with E. C. ENOCH; Santubong (Apr.).—1961. *Malaya*: Jambu Bongkok Forest Reserve, Trengganu (Mar.); Menchali Forest Reserve, Pahang (Mar.); Tanjong Hantu Forest Reserve, Perak (Apr.); *Sarawak*: Bako National Park (Apr.).—1967. Padang area of Jambu Bongkok (Feb.–Mar.).

**COLLECTIONS.** Main set in *Herb. Univ. Mal. Kuala Lumpur*; *Sarawak* dupl. in *Herb. Sing.* (600 nos), and in *Herb. For. Dep. Sarawak*. No duplicates were made of the Forest Reserve collections. His personal numbers as far as the survey goes end with JC 1670 (P.C.S.M. no 2600).

#### Carrier, Charles Lionel

retired from the Malayan Forest Service in Mar. 1964; was still living in Malaya, at Ipoh, in 1970.

**BIOGRAPHICAL DATA.** *Mal. For.* Apr. 1964, p. 81, portr.

#### \*Carroll, D.

(1897, Malaya; 1955, ?) was attached to the Sarawak Forest Department from its start in 1921, as Forest Ranger, special grade, in charge of the administration of Kuching, Lundu and Sadong forest districts. By the time he had retired in 1954 he had won a M.B.E. and been promoted to the senior staff.<sup>1</sup>

**COLLECTIONS.** Several hundreds of numbers for the Forest Department, from 1922 onwards; *Herb. Sarawak*.

**LITERATURE.** (1) Cf. P. S. ASHTON in *Fl. Mal. Bull.* no 21, 1966, p. 1432–1435.

#### \*Carter, Dr Walter

(1897, Leeds, England; x), naturalized American entomologist; B.S. Montana (1923), M.S. Minnesota (1924), Ph.D. (1928), from 1925–30 employed by the U.S. Dept of Agriculture; Head Entomological Dept Pineapple Research Institute Hawaii, 1930–62; in 1962 emeritus professor; in Jamaica 1962–65. He made numerous travels, and visited Africa, *Malaya, Java, the Philippine Islands, Australia, and Fiji* in 1937–38. From 1964–65 in the employ of the U.N. for Technical Assistance.

**COLLECTIONS.** Living orchids, also from *Java, Celebes, and Fiji*, turned over to Mr NAKAMOTO in Hawaii.<sup>1</sup>

**LITERATURE.** (1) 'Carteria', The story of a collection (*Bull. Pac. Orch. Soc. Hawaii* 26, 1968, p. 3–8, 3 phot.).

**BIOGRAPHICAL DATA.** In *Amer. Men of Science. Phys. and Biol. Sciences*, 11th ed. 1965.

#### Castro, Arturo P.

(1914, Tondo, Manila, P.I.; x), B.S.E. graduate, Southeastern College, Pasay City. From 1941–49 in the employ of the National Museum Manila as a Helper; from Apr. 1949 Laboratory Technician, Ateneo de Manila. He accompanied a scientific expedition to Bataan with Dr GILLIARD (see there).

**COLLECTING LOCALITIES.** Add: *N. Luzon*: Abra and Mountain Prov.; *Mindanao; Palawan*.

**COLLECTIONS.** Besides plants he collected animals and ectoparasites of birds *etc.*

**C.B.D.**, see DALHOUSIE, Countess of (*Cycl. Fl. Mal. I*, 1, 1950).

#### Céré, Jean-Nicolas (de)

Director of the Royal Garden at Montplaisir; rightly: Monplaisir.

**BIOGRAPHICAL DATA.** Add: MADEL, LY-TIO-FANE (ed.): 'Mauritius and the Spice Trade. The Odyssey of Pierre Poivre' (*Publ. no 4 of Mauritius Arch. Publ. Fund* 1958, w. portr. facing p. 100).

CF nos, see Conservator of Forests series.

#### \*Chai, Paul Piang Kong

(1941, Kuching, Sarawak; x), graduated at the University of Malaya (Hons Bot.) in 1970. From

Jan. 1970 appointed Forest Botanist, Forest Department, Sarawak. He will be engaged on an ecological study of mangrove forest in Sarawak and will continue the preparation of a manual on the non-Dipterocarp trees of Sarawak.

He collects in the series of the Sarawak Forest Department, and accompanied H. P. NOOTEBOOM on his Sarawak exploration in 1970, continuing another week's collecting after N.'s departure.



CHEW WEE-LEK

**COLLECTING LOCALITIES.** From 1970 onwards throughout Sarawak.

**COLLECTIONS.** *Herb. Sarawak* and with NOOTEBOOM's collection in *Herb. Leyden*. In the 'S' series; dupl. in many herbaria.

**Chamisso, Adalbert von**

**LITERATURE.** (1) Add: For itinerary in Alaska cf. Bot. Not. 1940, p. 298-299.

**BIOGRAPHICAL DATA.** Add: Occ. Pap. Calif. Ac. Sc. no 20, 1943, p. 21-27.

**\*Chan Yee-Chong**

Assistant of the Forest Research Institute Kepong, Malaya.

**COLLECTING LOCALITIES.** 1969. *Malaya*: Kedah, Ulu Muda (Jan. 15-24) with P. S. BRAY; *Langkawi* and Perlis with CHELLIAH (Mar. 10-19).

**COLLECTIONS.** In *Herb. F.R.I. Kepong*.

**\*Charington**

collected with G. H. S. WOOD (see there) in N.

*Borneo* in the SAN series. See Forest Dept North Borneo.

**Cheang Koh Choy**

collected in *Malaya* in 1963; Superintendent of the Penang Gardens.

**Cheesman, Lucy Evelyn**

(d. 1969, Highwood, near Chelmsford, Essex, England).

**LITERATURE.** (2) Add: 'The Land of the Red Bird' (London 1938).

**BIOGRAPHICAL DATA.** New Scientist 6, 1959, p. 80-81; Entom. Monthly Mag. 105, 1969, p. 217-219.

**\*Chelliah, S.**

Assistant of the Forest Research Institute at Kepong, *Malaya*, collected some hundreds of plants in Kedah, *Penang*, Johore, Selangor, Perak, Trengganu and Pahang in 1966-67; Bt. Bauk F. R., Trengganu (Nov. 12-14, 1968).

**\*Chew Wee-Lek**

(1932, Singapore; x), botanist, educated at the University of Malaya, where he took his B.Sc. (Hons) in Botany under Prof. HOLTUM in 1956; in Oct. of that year he joined the staff of the Singapore Botanic Gardens. He went to Cambridge, England, in Sept. 1957, and took his Ph.D. under Prof. CORNER at Cambridge University in June 1960. Since 1963 Keeper of the Singapore Herbarium and Botanist at the Botanic Gardens, Singapore, later Acting Director. He took part in two Royal Society expeditions to Mt Kinabalu under Prof. CORNER. He joined the staff of the Royal Botanic Garden Sydney from Apr. 1970.

His main interests are *Urticaceae* and *Piperaceae* of Malesia, and lianas of *Malaya* and Singapore.

*Litsea chewii* KOSTERM. was named after him.

**COLLECTING LOCALITIES.** 1957. *Malaya*: Trengganu (Mar. 27-31) and Kelantan (Apr. 1-6), *Penang* (7-8), Kedah (9-12), with KIAH BIN HAJI SALLEH; Kedah, Perlis, and *Langkawi Is.* (May 10-29).—1960. *Java*: Ujung Kulon and P. *Peutjanj* (Oct. 26-Dec. 10, with Dr KOSTERMANS, Mr KOCHUMMEN, and Mr GUTIERREZ).—1961. *Sabah*: Mt Kinabalu (May 29-Aug. 16, *Royal Society Expedition*, see under E. J. H. CORNER). *Malaya*: Pahang at Tasek Bera (Oct. 24-31).—1962. In *Pahang* with M. D. POORE and F. MERTON. *Sarawak*: Niah Caves (June 3-7), Baram R. (8-12), Mt Mulu (June 13-17), Mt Api and Benarat (20-29).—1963. *Sarawak*: Seburan Limestones in Bau (July 12-15), Mt Gading (17-21), Sg. Priam (22), Mt Mentawa and Maja, near Kuching (25-28). *Malaya*: Cameron Highlands, collecting at Sg. Pauh Valley, Mt Berumbun, Bt Siku, Bt Ruil, Mentigi F. R., Sg. Boh, Sg. Bertam Valley, Mt Brinchang, Mt Jasar (Oct. 2-12). *Sarawak*: Bau and Tiang Bekap (Oct. 11-29).—1964. *Sabah*: Mt Kinabalu at the Pinosuk Plateau between 8000 and 5000 ft alt. (Jan. 10-May 20, *2nd Royal Society Expedition* under Prof. CORNER).—1966. *Sarawak*: Bt Lambir (Feb. 3), Marudi F. R. (5-6); Baram Distr.: Kuala Melinau Paku (8-10); Sg. Tutoh, Sg. Melinau (11-12); G. Api and vicinity (13-17); Sg. Terikan in Limbang Distr. (18-19). *Malaya*: G. Bubu in Perak (Aug. 13-18), Cameron Highlands



in Pahang (Oct. 1–4).—1967 *Sarawak*: G. Api Benarat, Tiang Bekap limestone near Kuching, on Mt Maja and Mentawa (Mar. 10–14); Mt Santubong (15–23).

Besides, numerous daily collecting forays in Singapore and nearby Johore.

**COLLECTIONS.** About 3000 *nos* of flowering plants of which those from 1957 mainly in the SFN series, those from Kinabalu (1961, 1964) in the RSNB series (Royal Society North Borneo numbers), and the rest in his own C.W.L. series (to be cited in his own name). The RSNB series distributed by *Kew*, the others by *Herb. Sing.* Dupl. in *Leyden*, *Kew*, *Arn. Arbor.*, *U.S. Nat. Mus.*, *Copenh.*, *Aarhus*, *Berkeley*, *Saraw.*, *Kepong*, *Edinb.*, and specialists.

#### **Chinnery, Ernest William Pearson**

Add: He was also the collector of 40 sugar-cane varieties for the Colonial Sugar Refining Co. of Australia in 1921 (*cf.* Hawaiian Plant. Rec. 55, 1958, p. 213; Cane Growers' Quart. Bull. Brisbane 15, 1951, p. 40).

**COLLECTING LOCALITIES.** Add: 1921. *Papua*: in the district of Korigo, Orama, and Durom on the side of Mt Obree in the Owen Stanley Range at c. 700–1000 m alt.

\*Chong, J., see Forest Dept North Borneo.

#### \*Christiansen, Sofus Emil

(1930, Salby near Haslev, Denmark; x) was educated at the University of Copenhagen; cand. mag. (geogr.) 1955; 1962 Assistant at the Geographical Institute, University of Copenhagen.

As a member of the Danish 'Noona Dan Expedition' (see there for Itinerary, Collections *etc.*) he collected some botanical specimens at Yalon (*Mussau*, *Bismarck Arch.*), and in Rennell (Solomon Is.) in 1962. In 1965 and 1966 he made a small collection in Rennell and Bellona (Solomon Is.).

#### \*Cid, Miss F.

Instructor of Botany in a private school in Pangasinan Province, Luzon.

#### Cinatti, Ruy

**COLLECTIONS.** Add: In *Herb. Leyden*: 380 *nos*.

#### \*Clark & Roberson

collected a grass, numbered 1024, in moist rice paddies (Aug. 1945). Found by VELDKAMP in MSS JANSEN together with specimen of *Pseudoraphis* *sp.*

#### \*Clarke, William Carey

(1929, Marblehead, Mass., U.S.A.; x), took his Ph.D. in Geography at Berkeley (1968); presently Professor of Geography and Anthropology, California State College at Hayward, Cal., U.S.A.; 1968–69 appointed as Associate Professor of Geography, University of Hawaii, Honolulu. Member of expedition to Bismarck Mts, Terr. of New Guinea, 1964–65, for study of cultural ecology of montane shifting cultivators (under the direction of A. P. VAYDA of Columbia University).<sup>1</sup>

**COLLECTING LOCALITIES.** 1964–65. *Terr. of New Guinea*: Simbai Valley, Bismarck Mts.

**COLLECTIONS.** Nos 1–132 in *Herb. Lae*; certain specimens forwarded elsewhere, e.g. *Pandanus* to B. C. STONE, Kuala Lumpur; ferns to HOLTUM, *Kew*.

**LITERATURE.** (1) W. C. CLARKE: 'From Extensive to Intensive Shifting Cultivation: A succession from New Guinea' (*Ethnol.* 5, 1966, p. 347–359); 'Soil Fertility and Cultivation Practices in New Guinea' (with J. M. STREET) (*J. Trop. Geogr.* 24, 1967, p. 7–11).

#### Clason, Else Willem

(d. 1971, Groningen, Gr., Netherlands).

**BIOGRAPHICAL DATA.** Jaarboek, Versl. & Meded. Kon. Ned. Bot. Ver. over 1971, 1972, p. 5.

#### Clemens, Mary Strong

(d. 1968, Chermiside Garden Settlement, Brisbane, Australia).

**COLLECTING LOCALITIES.** Add: *Philippines*: Mt Pulog (Mountain Prov., *Luzon*) with RAMOS & EDANO (Feb. 1925), where they detected the genera *Pimpinella*, *Potentilla*, and *Koordersiochloa*, new to the Philippines.

**COLLECTIONS.** Also dupl. (*Borneo*; fairly complete set from *New Guinea*) in *Herb. Edinb.*

**BIOGRAPHICAL DATA.** *Fl. Mal. Bull.* no 23, 1969, p. 1669–1671.

#### \*Cockburn, Peter Francis

(1946, Brighton, England; x), botanist, educated at University College, Oxford 1964–67. He arrived in Malaya in Aug. 1967 under Voluntary Overseas scheme, and worked at Kepong from Sept. 1967–Dec. 1968, with T. C. WHITMORE. He made prolific collections in virgin territory along the east coast of Malaya and wrote up several families for the Tree Flora of Malaya. Mar. 1969 appointed Forest Botanist, Sabah, on contract. Co-author of the Tree Flora of Malaya.

**COLLECTING LOCALITIES.** *Malaya*. 1967. Ulu Kelantan, Sungei Lebir with T. C. WHITMORE and B. C. STONE (Aug. 31–Sept. 24); Ulu Kelantan, Dabong, Relai F. R. (Oct. 15–Nov. 2).—1968. G. Blumut, Johore (Feb. 2–8); Tg. Penawar, SE. Johore (19–24); Sungei Sedili Kechil (25–28); G. Panti, Johore (29–Mar. 6); Ulu Endau, Johore (Mar. 19–Apr. 1); Losong F. R. and Ulu S. Anak Andau (2–6); G. Lawit, Besut N. Trengganu (Apr. 22–May 6); Ulu Sungei Trengganu (May 27–June 16), 6 collecting camps at various points on the river; G. Mandi Angin<sup>1</sup>, Trengganu, with T. C. WHITMORE; G. Tapis, Pahang, with P. F. BURGESS (Sept. 3–14); Bt. Chini, S. Pahang (Oct. 1–14), with P. S. BRAY. A few collections made at Fraser's Hill, Tasek Berak (Pahang) and Ulu Kali on single day trips.—1969. *Sabah* (N. Borneo). Kalabakan F. R. Tawau (May 5–12); Madai F. R. Mostyn (13–15); Lahad Datu Distr. (16–21); Sepilok F. R., Sandakan (June 5–7) 16 miles S of Sook on Pensiagan Road in the Wittt Range (June 9–16); Loro F. R., Kudat Distr. (17–20); Sepilok F. R. (Aug. 25–28); Pulau Selingan (Sept. 24–25); Pulau Timbul Mata, Darvel Bay (Oct. 5–9); Crocker Range F. R. (Oct. 12–20).

**COLLECTIONS.** 2110 collections in *Malaya*, numbering KEP 115951–116000 and FRI 7000–8050, 8101–8500, 10501–11110; full set at *Kepong*, dupl. in *Kuala Lump.*, *Sing.*, and some to *Arn.*

*Arbor., Sarawak and Sandakan. Sabah collections* full set at *Sandakan*, dupl. to *Kuala Lumpur, Sing.*, and partly to other herbaria.

Most collections concentrated on tree species; also collecting *Indotristicha malayana* in W. Trengganu.<sup>2</sup>



COCKBURN

LITERATURE. (1) P. F. COCKBURN: 'Gunong Mandi Angin, Trengganu: a botanical visit' (Mal. Nat. J. 22, 1968-69, p. 164-170).

(2) Cf. *Blumea* 18, 1970, p. 152-155).

**Collenette, Irish Sheila Darnton**

Add: She made a trip to Mt Kinabalu and Mesilau R. with H. SLEUMER, H. P. FUCHS, and others in July 1963.

Some plants were collected with FUCHS numbers (see there).

**\*Collins, John D.**

transport man and field assistant to the 6th Archbold Expedition 1959. Occasionally he collected plants with L. J. BRASS or alone.

*Rhododendron collinsii* SLEUM. was named after him.

COLLECTING LOCALITIES. 1959. *Terr. of New Guinea*: Mt Otto (Aug. 12), Mt Michael (31). For the complete itinerary see L. J. BRASS.

COLLECTIONS. See sub L. J. BRASS. Plants collected by him evidently labelled L. J. BRASS & J. D. COLLINS.

**\*Comber, Jim B.**

student gardener at Kew from Apr. 1951 until 1955. He then went to Sapong Estate, near Tenom, Sabah (N. Borneo).

COLLECTIONS. ? All from the Tenom area, Sabah, rather few in number. According to Mr L. FORMAN (Kew) his 1964 collections range from nos 100-162; list for 1965 for nos between 4001-4194, including many ferns. At Kew.

In 1964 he sent some living plants to Kew Gardens.

**Commerson, Philibert**

LITERATURE. (1) Add: An appendix to COMMERSON's diary of his journey with BOUGAINVILLE consists of a list of plants collected in the island of Buru.

**Conklin, Harold C.**

COLLECTING LOCALITIES. Add: *Mindoro* (Dec. 1957-Feb. 1958); *N. Luzon*, Mountain Prov. (Feb. 1963) with BUWAYA.

**Conover, J. T.**

BIOGRAPHICAL DATA. Portr. in HATUSIMA, Flora Ryukyus 1971, p. 68.

**Conservator of Forests (CF) series**

Add: SUDEN, SULEIMAN BIN MANJA, UJANG.

**\*Coode, Mark J. E.**

(1937, Plymouth, England; x), botanist, educated at Cambridge (B.A. 1961), who made expeditions to E. Congo (1959) and Turkey (1962, 1965); assisted Dr P. H. DAVIS with the preparation of vols 1 and 2 of the Flora of Turkey, when on the staff of the University of Edinburgh.

In 1966 appointed Senior Botanist at the Botany Division, Forestry Department at Lae, Territory of New Guinea. Initially working on Melanesian *Terminalia*.<sup>1</sup> Author of a Foresters' Manual of *Combretaceae* (1969).

COLLECTING LOCALITIES. 1966. *Territory of New Guinea*: Lae, local collecting (Oct.); around Popondetta with J. S. WOMERSLEY in the latter's numbering series (Nov. 16-18); Lae, local collecting (Dec.).—1967. *New Ireland*<sup>2</sup> with P. KATIK and T. E. CROPLEY: around Kavieng (Jan. 22-23), Lavongai, c. 26 miles downcoast from Kavieng (24); around Katu, Lavongai, Lossuk, etc., based at Katu Plantation (26-Feb. 4); to Lemeris and Namatanai, a few roadside collections and some inland (6-8), round Kavieng (10-11), leaving Kavieng for Kaut (13), vicinity of Kaut (14-17), back at Kavieng (20) and return to Lae. *Terr. of*

*New Guinea*: Goroka-Parabo near Okapa East. Highlands Distr., with WOMERSLEY (18); collecting around Purosa (S of Okapa) (19), Okapa environs (20), Purosa (22); Gimi Valley, SW of Okapa (23); Okapa Valley, SE of Okapa (24); to Lae (25); to Ioma, Northern Distr. (31), Ioma area (June 1), N of Ioma (2), S of Ioma (4), Popondetta (5), to Lae (6); S. Highlands Distr., with McVEAN and L. K. WADE; Mendi (July 13), Mt Giluwe via Komia and Kagaba (14); camp at c. 10500 ft, collecting by campsite (15–16); higher altitude collecting (17); back to Mendi (18) and Lae (19). *New Britain*: Hoskins on the N. coast, local collecting (Dec. 18); Tabai Rikam near Hoskins (19–20), Kwala Kessi near Hoskins (21), Lae (22).—1968. *Terr. of New Guinea*: Kassam Pass (Jan. 8), Kassam (9–16), and to Lae (17). Near Lae (Feb.). To Madang (Mar. 5), proceeding to Utu; road N of Madang (7), Aione on Ramu R. (8); Aione area (9–13), and return to Lae (14); Wau (Apr. 22); near Lae (May). To Edie Creek (June 6), Edie Creek-Kaindi (7–11); Mt Hagen (Sept. 9), Kagaba (11), around Kagaba (12–19).—1969. Via Rabaul to *New Ireland*: Namatanai (Jan. 11), collecting on coast road around Karu (11–13), Kavieng (14), *Namance I.* (15–17), Kavieng (18), back via Rabaul (20) to Lae (21). To Bulolo-Wau-Kaindi (June 5–6) with P. WARDLE; Ialibu, S. Highlands Distr. (16), Giluwe camp at c. 11000 ft, collecting between 11000–12500 ft (18–20), Ialibu (21), around Ialibu and Maral (22–24), Mt Hagen (village) (25), Lae (26). Short visit to Bougainville (Solomons) collecting round Tonoleki (Aug. 9–14). Via Rabaul and Kavieng to *Emira I.* (coll. Sept. 4), via Kavieng (5), *Taskul I.* and *New Hanover* (6), back to Kavieng; *Namance I.* (8) and Kavieng; down coast road and across *New Ireland* to Lemusmus and back to Kavieng (9), Kavieng (10), Rabaul and Lae (11). To Bulolo-Wau (Okt. 11–12).—1970. Via Rabaul (Jan. 16) to Keravat and back (17); flight to Manga (S. *New Ireland*) for reconnaissance: Tranlan, Muliama (20), Danfu bridge (21), up Danfu R., camping at 800 ft (22), Danfu area from above camp (23–Feb. 20), back to Manga (20), by road to Lei (24) and down coast to Matkamlagira (arrived 27); attempt to cross Weitin-Kamdaru divide (some SANDS *nos*); Matkamlagira (Mar. 3).—1971. *Papua*: Tapini (Apr. 29) by helicopter to top Mt Strong with P. F. STEVENS,<sup>3</sup> summit area and upper forest (May 1–3); walk to Torura (5), to Tapini by helicopter and to Waitape (6); helicopter to Mt Scratchley<sup>3</sup> (7), flying back (8), Waitape (8–11).

**COLLECTIONS.** *Herb. Lae*, a.o. 300 *nos* *New Ireland*; dupl. in *Herb. Edinb.* etc.

**LITERATURE.** (1) Author of 'A new *Terminalia* from Melanesia' (Kew Bull., in press).

(2) Cf. Fl. Mal. Bull. no 22, 1968, p. 1541.

(3) M. J. E. COODE & P. F. STEVENS: 'Notes on the Flora of Two Papuan Mountains' (Pap. New Guin. Sc. Soc. Proc. 1971, 23, 1972, p. 18–25; with Appendix of plants collected above 3300 m, p. 23–25).

#### Cook, James

**LITERATURE.** (2) Add: J. C. BEAGLEHOLE: 'The Journals of Capt. James Cook. The Voyage of the Endeavour, 1768–1771' (1955 Cambridge, Hakluyt Society, vol. 1).

(6) Add: See also 'Captain Cook's artists in the

Pacific 1769–1779', compiled by ANTHONY MURRAY-OLIVER (New Zealand 1969, pp. xxiv, 168, 130 pl.).

#### Coolidge, Harold Jefferson

Add: A member of the Pacific Science Council, representing the U.S. Nat. Academy of Sciences, for many years. After his retirement by the end of 1971 he was awarded a Honorary Life Fellowship.



COODE

#### Coomans de Ruiter, Louis

(d. 1972, Hilversum, Netherlands).

#### \*Cooper, David Edward

(1928, Christchurch, New Zealand; x), graduated M.Sc. (in chemistry) at Auckland University. Successively working in the Organic Dept of this University, at Auckland Hospital Laboratory, and since 1956 with Auckland Farmer's Freezing Co. Laboratory. He joined the New Zealand New Guinea Expedition 1961 (leader C. K. PUTT)<sup>1</sup> which was supported by the New Zealand Alpine Club and the Mt Everest Foundation. The objective was to climb in the Carstensz Mts as well as to carry out some collecting and scientific work. COOPER made the botanical collection.

**ITINERARY.** 1961. *Dutch West New Guinea*: walking from Tiowe (near the confluence of the Baliem and Gi Malere Rivers), travelling up the Gi Malere, crossing over into the West Baliem; following the West Baliem to its head and crossing the plateau into the Haga Valley; subsequently to the North Wall of the Carstensz Mts (June),

crossing the Zendilerong R. and the head of the Kemaboe River.

**COLLECTIONS.** About 42 specimens, partly sterile and mouldy; grasses and ferns in *Herb. Canterbury Un. Christchurch*; other material in *Herb. Auckland War Mem. Mus.* (on behalf of R. C. COOPER), and phytochemical specimens in Auckland University (on behalf of Prof. L. H. BRIGGS); some dupl. in *Herb. Leyden*.

He brought home living plants, seeds, and cuttings also.

**LITERATURE.** (1) D. COOPER: 'Some botanical and phytochemical observations in Netherlands New Guinea "New Zealand New Guinea Expedition 1961"' (*Econ. Bot.* 25, 1971, p. 345-355).

C. K. PUTT submitted an expedition report to the Mount Everest Foundation.

**Copeland, Edwin Bingham**  
(d. 1964, Chico, Cal., U.S.A.).

He wrote a 'Fern Flora of the Philippines' in 3 volumes (1958-60).

**BIOGRAPHICAL DATA.** *Am. Fern J.* 54, 1964, p. 177-188, portr., partial bibliogr.

\***Coppock, Frank**

forest officer in various parts of New Guinea, collected some tens of specimens in the NGF series, *E. New Guinea*, at: Keravat (*New Britain*) (1955), Brown River (Oct. 1959), Trans-Vanapa (Oct. 1959), and at Sangara, Popondetta (May 1960). In *Herb. Lae*.

\***Cordero Jr, Paciente A.**

(1941, Burauen, Leyte, Visayas, P.I.; x) was educated in botany at the Far Eastern University (B.S.); since December 1963 Botanical Collector and later Museum Technician in the Botany Division (Herbarium) of the National Museum; later in charge of the Algal section, a group in which he specializes. He is working on his Masters degree at Kagoshima University under Dr T. TANAKA.

**COLLECTING LOCALITIES.** 1963. Manila and suburbs, *Luzon*; *Lipun I.*, Quezon, *Palawan* and nearby islets, with D. R. MENDOZA and R. A. ESPIRITU.—1964. *Palawan* (Apr.-June). *Batanes & Camiguin Islands* together with a group of Kagoshima University, Japan (Nov. 9-30).—1965. *Batan & Sabtan Islands* (Apr. 9-May 7) with G. T. VELASQUEZ and A. TIMBOL; Lubuagan, Kalinga-Apayao Prov., *Luzon*, with R. M. DEL ROSARIO.—1966. Puerto Galera, *E. Mindoro, Luzon* (with R. M. DEL ROSARIO and R. A. ESPIRITU); Bolinao, Pangasinan, *Luzon*.—1967. *Luzon*: Dalton Pass (with MENDOZA) (Mar. 3-18); *Biliran I.* (May 2-June 3); *Leyte*; Visayas.

**COLLECTIONS.** In the PNH series, mostly *Algae* (> 1000).

**Corner, Edred John Henry**

Later Reader, and in 1966 appointed Professor of Tropical Botany.

He received the Darwin Medal of the Royal Society in 1960, and the Linnean gold Medal in 1970.

Leader of several expeditions including the Royal Society Expedition to the Solomon Islands in 1965.<sup>7</sup>

April 1972 he went for a study visit to Bogor, but left for Singapore 3 weeks after his arrival.

**COLLECTING LOCALITIES.** 1934 add: Jason Bay.<sup>4</sup>—1941. *Langkawi* (Nov. 13-22); G. Baling in Kedah (25).—1959. *Sarawak*; Bako National Park.—1960. *Papua*, Central Distr.: Waitape (5000 ft) (Aug. 24) and probably elsewhere in *Australian New Guinea*.—1961. *N. Borneo*, *Royal Society Expedition* to Mt Kinabalu (see also CHEW WEE LEK).<sup>5</sup>—1964. *N. Borneo*, *2nd Royal Society Expedition* to Mt Kinabalu (Jan. 14-May 23).<sup>6</sup>—1965. *Royal Society Expedition to the Solomon Islands*,<sup>7</sup> partly accompanied by T. C. WHITMORE (see there).

**COLLECTIONS.** Add: Dupl. *Mal. Penins.* in *Herb. Edinb.* The Royal Society Expeditions collections (numbered RSNB and RSS) will be distributed from *Kew*.

**LITERATURE.** (1) Add: and of several other books on theoretical botany, etc.

(4) J. H. KERN & C. G. G. J. VAN STEENIS: 'An interesting new record from the Malayan beach: *Spilanthes urens* Jacq., its synonymy and distribution' (*Gard. Bull. Sing.* 17, 1959, p. 273-275).

(5) Cf. *Fl. Mal. Bull.* no 16, 1961, p. 804-806.

E. J. H. CORNER: 'The Royal Society Expedition to North Borneo 1961' (*Emp. For. Rev.* 1962, p. 224-233, route map, 4 photogr.); *ditto* 'Reports' (*Proc. Linn. Soc. Lond.* 175, 1964, p. 9-56, 24 photogr.).

See also 'A discussion on the Results of the Royal Society Expedition to North Borneo, 1961' (*Proc. Roy. Soc. B* 161, 1964, p. 1-91).

(6) E. J. H. CORNER: 'Exploring North Borneo' (*New Scientist* no 366, 1963, p. 488-490, 3 photogr.; 'Mount Kinabalu East' (*Sabah Soc. J.* 4, 1965, p. 170-817, 7 fig., 8 pl.).

(7) A discussion of the Results was organized by CORNER; published in *Phil. Trans. R. Soc. B* 255 (1969) p. 185-631, 196 fig., by several authors.

**BIOGRAPHICAL DATA.** *Biol. J. Linn. Soc.* 2, 1970, p. 322-324.

**Cowley, Ebenezer**

(see *Cycl. Fl. Mal.* I, 1, 1950) made an earlier (Dec. 1892) attempt to collect sugar-cane varieties in *Papua* (Mabudauan, Samarai, Thursday I.), but the material was so thoroughly fumigated that not a single bud survived.<sup>3</sup>

**LITERATURE.** (3) Cf. *Cane Growers' Quart. Bull.* Brisbane 15, 1951, p. 37-38.

\***Cox, Elizabeth Monica** (née Howard)

(1908, Durham, S. Africa; x) got married to Mr J. K. COX in 1931. She made joint collections with her husband (see there), both in W. Africa and N. Borneo.

\***Cox, John Kidman**

(1906, Lahore, Pakistan; x) was educated in India and South Australia; in 1931 appointed to the Colonial Agricultural Service, posted to the Gold Coast; transferred to North Borneo in 1947; retired in May 1960 as Director Department of Agriculture, Jesselton, N. Borneo. Now settled in Devon, England.

**COLLECTING LOCALITIES.** 1948-58. *N. Borneo* including on Mt Kinabalu.

**COLLECTIONS.** Mostly made jointly with his wife, E. M. HOWARD COX (see there), first in W. Africa (*nos* 1–142, mostly in Kew Herb.), and later in N. Borneo (*nos* 143–1052). Early Borneo plants partly in *Herb. Sing.*, some in *Kew* (252–257, 261, 300, 306–347), some in the *Brit. Mus.* (250, 258–266, 301–305, and various ferns), small coll. of 22 orchids in *Herb. Un. Calif.*, and a collection of orchids & dicots (900–1015) in *Herb. Leyden*.

Their prime interest was in *Orchidaceae* of which they maintained living collections; herbarium specimens were mostly limited to plants difficult to identify or which were of special interest.

His collections are consecutively numbered.

**\*Craven, Lyn A.**

botanical collector and successor of P. DARBYSHIRE, joined C.S.I.R.O. in 1964 and collected in *Bougainville* (Solomon Is.) that year. In 1966 in *New Guinea*. See sub R. SCHODDE, and R. D. HOOGLAND (Sepik area); last collection.<sup>1</sup>

In about 1971 he has been appointed assistant in the Land Surveys Division of C.S.I.R.O., Canberra.

**LITERATURE.** (1) L. A. CRAVEN: 'Searching for Rhododendrons in New Guinea' (*The Rhododendron* 7 (1), 1968, p. 11–16, 3 photogr.).

**Creagh, Charles Vandeleur**

**LITERATURE.** (1) Add: W. MEIJER: 'The Contributions of Governor Charles van de Leur Creagh to Botanical Exploration in Sabah, 1888–1895' (*Sabah Soc. J.* 5, 1969, p. 67–68).

**\*Cropley, Timothy Eric**

(1947, Sydney, N.S.W., Australia; x), medical student Sydney University, and a temporary member of the staff at Lae; he accompanied M. J. E. COODE (see there) with a survey party in *New Ireland*.

**COLLECTIONS.** *Herb. Lae*; *New Guinea* dupl. 1967 in *Herb. Edinb.*

**\*Crosbie, A.**

Staff surgeon of the Challenger Expedition, 1873–76 (itinerary see MOSELEY).

**COLLECTIONS.** Some dupl. of bryophytes and vascular plants of the *Aru Is.* in *Herb. Edinb.*

**Cruttwell, Norman Edward Garry**

In 1970 Reverend Canon; stationed at Agaun, Daga country since 1966.

He is interested in *Rhododendrons* also.<sup>1</sup>

**COLLECTING LOCALITIES.** Add: He visited the Daga<sup>1</sup> once or twice a year on foot; later at the Head Mission Station in the Daga at Agaun (3200 ft). He collected also at Tua (4500 ft), Kanasura (2500 ft), Bonendo, Birat (Milne Bay Distr.), and Mt Garatun (5000 ft).—? 1968. 2nd Visit to Mt Simpson (Matawan) with PADDY WOODS (first time climbed from the N. side, this time from the W.).—1972. With R. PULLEN, J. F. VELDKAMP and P. F. STEVENS on Mt Suckling in *Papua*.<sup>6</sup>

**COLLECTIONS.**<sup>2</sup> Dupl. in *Herb. Edinb.* (1952–); partly collected with P. J. B. WOODS, GALORE, etc. On Kew labels sometimes N.E.G.C.<sup>4</sup> He collected some 1500 *nos* in Menapi and Daga districts. Recent collections in *Herb. Lae*.

**LITERATURE.** (1) Add: 'Rhododendron time in the Daga' (*The Rhododendron* 6 (3), 1967, p. 7–9, 3 photogr.); 'The Rhododendrons of the High Daga' (*The Rhododendron* 8, 1969, p. 11–14); 'A new Rhododendron' (*l.c.* (2), p. 8–9, 1 fig.).

(3) H. SMITH: 'Two new gentians from Eastern New Guinea' (*Kew Bull.* 1957, p. 225–227, 2 fig.).

(4) Cf. Index Coll. Edinb. *Herb.* 1970, p. 72.

(5) N. E. G. CRUTTWELL: 'The Ascent of South Suckling' (*The Rhododendron* Dec. 1972, p. 7–13).



CRUTTWELL

**Cubitt, George Eaton Stannard**

(d. Sept. 17, 1967, aged 91 years, probably at Winchester, England).

**BIOGRAPHICAL DATA.** *Mal. For.* 30, 1967, p. 164.

**Cuming, Hugh**

**COLLECTIONS.** In addition to the information concerning the numbering given in the Cyclopaedia (*Fl. Mal.* I, 1), it seems worthwhile to give a more detailed extract of the list published by MERRILL, cf. *l.c.* **LITERATURE** (6).

Collection labelled "Ins. Philippinae 1841": 1–434. Vascular cryptogams. Most of the species from the *Philippines*, a few from *Malacca*, *Singapore*, etc. Apparently properly labelled.—435–694. *Luzon*.—695–702. *Corregidor*.—703–1478. *Luzon*.—1479–1603. *Mindoro*.—1604–1673. *Mindanao*.—1674–1732. *Samar*.—1733–1757. *Leyte*.—1758–1789. *Cebu*.—1790–1810. *Negros*.—1811–1857. *Bohol*.—1858–2153. *Philippines*, not localized (exceptions 2052; 2053–2058).—2052. *Malay Peninsula*.—2053–2058. *Singapore*.—2154–2242. Cellular cryptogams chiefly from the *Philippines*.—2252–2399. *Malay Peninsula*.—2400–2427. *Singapore*.—2428–2443. *Sumatra*.—2444–2464. *St. Helena*.

A. DE CANDOLLE in his *Prodromus* vol. 17 (1873) p. 316 gave information on the numbering of the 'Plantae Cumingianae' as far as not collected in the Philippines. It is less complete, however, and partly incorrect.

Also dupl. in *Herb. Edinb.*

BIOGRAPHICAL DATA. Add: In HEMSLEY & HOOKER, *Biol. Centr.-Amer.* 4, 1887, App. p. 133.

**Cunningham (or Cuninghame), James**

His 2nd voyage to China took place in 1700 (not 1701) o/b Eaton-Fryatt. According to DANDY on both voyages Batavia (*Java*) was touched (not in June 1700, however, cf. SL. 3321, f. 52, in which letter it is stated that they did not go ashore in Borneo either in July of that year). His 2-years' imprisonment in Cochinchina took place after the massacre at Pulo Condor(e). He arrived at Batavia in April 1707. His last letter to SLOANE is dated Calcutta, Jan. 4, 1708.<sup>3</sup>

COLLECTIONS. In *Sherardian Herb. Oxford*: ferns from Chusan and Malacca.<sup>4</sup>

LITERATURE. (3) Cf. J. E. DANDY: 'The Sloane Herbarium' (1958) p. 117-122, pl. 5; letters in SLOANE MSS vols 3321, 4025, 4038, 4039, 4040, 4041, 4064, f. div., from CUNINGHAME to PETIVER and SLOANE.

(4) Cf. H. NEWMAN CLOKIE: 'Account of the Herbaria, Dept. Bot. Univ. Oxford' (1964) p. 76.

**Curtis' collector**, see HAMAD.

**Cuzner, Harold**

(d. Sept. 25, 1956, Manila, Luzon, P.I.) brought up in the U.S.A. (B. Sc. 1905). Shortly after graduation he came to the Philippines to work in the Bureau of Forestry; in 1909 transferred to the College of Agriculture, U.P. He resigned in 1953.

BIOGRAPHICAL DATA. *Bull. Nat. Res. Council Philip.* 42, 1958, p. 6 (erroneously giving 1878 as year of birth).

**C.W.L.**, see CHEW WEE-LEK.

**Däniker, Albert Ulrich**

(d. 1957, Zürich, Switzerland).

BIOGRAPHICAL DATA. *Vierteljahrschr. Naturf. Ges. Zürich* 102, 1957, p. 373-374; *Verh. Schweiz. Naturf. Ges.* 137, 1957, p. 316-323, bibliogr., portr.

**Dampier, William**

COLLECTIONS. Add: Also *Java* specimens in *Sherardian Herb. Oxford*.

**\*Dan bin Hj. Bakar**, see Forest Dept Sarawak.

**Dansereau, Pierre**

Add: From 1961-66 Ass. Director New York Botanic Garden, and adj. Professor of Botany Columbia 1961- ; Sr Curator of Ecology 1966- ; Thomas Alva Edison visiting scholar at Cranbrook Institute of Science, 1967-68; at present back in Canada, at the 'Institut d'Urbanisme, Université de Montréal.'

BIOGRAPHICAL DATA. Who's who in Science 1968.

**\*Darbyshire, Paul James**

(1937, Cheadle, Cheshire, England; x), Botanical Assistant, Royal Botanic Gardens, Kew, 1957-60. Joined C.S.I.R.O. Division of Land Research and Regional Survey, Canberra, in Nov. 1960, as botanical collector; towards the end of 1963 (?1964) he left C.S.I.R.O., and is now living in England.

COLLECTING LOCALITIES. 1961. *Territory of New Guinea*: Sepik Distr.: (May 30-Aug. 5), Aitape Subdistr. with R. D. HOOGLAND (see there); (Aug. 15-Sept. 19) Lumi Subdistr., Torricelli Mts (nos 172-486).—?1962 or 1963. Coastal area near Port Moresby, from Rigo to Iokea.—1964 (or ?1963). Safia area, Northern Distr., Papua (July-Aug.).

COLLECTIONS. *Herb. Canberra* (C.S.I.R.O.); dupl. in *Lae, Leyden, Arn. Arbor., Brit. Mus., Brisb., U.S. Nat. Herb., Herb. Bog., Manila, Geneva, Berlin, Edinb.* Wood samples deposited with the Div. of Forest Products, C.S.I.R.O., Melbourne; Dept of Forests, Lae; and C.S.I.R.O., Canberra.

**\*Darke, Professor**

was assisted by C. E. RIDSDALE (see there) for making ethnobotanical collections near Cape Gloucester, *New Guinea*, in 1966.

**\*Dawa, Mrs E. D.**, see Philippine National Herbarium.

**\*Dawson, F.**

collected *Digitaria fuscescens* (PRESL) HENR. in the Lake Archbold Area, *New Guinea* in August 1955.

He was possibly employed by the Unevangelized Fields Mission, Hollandia.

COLLECTIONS. *Herb. Melbourne*.

**Day, Alice W.**

Add: *Eria alicae* QUISUMBING has been named after her.

**Day, John**

COLLECTIONS. Add: Ferns in *Herb. Edinb.*

BIOGRAPHICAL DATA. Add: *Gard. Chron.* 1888, p. 88.

**\*Day, Miss Merle F.**

(born about 1930), from Australia, was employed in the Buitenzorg Botanic Garden (Hort. Bog.) from about 1955-58. She travelled at least in E. Java and Timor. She was a member of the 'Kebun Raya Indonesia Timor Expedition', Feb.-Mar. 1956.

COLLECTIONS. *Herb. Bog.*: at least poor specimens from *Timor*. Some dupl. in other herbaria.

**\*Debeaux**

collected an unnumbered specimen of *Digitaria timorensis* (KUNTH) BALANSA and some other plants in *Singapore* (Apr. 17, 1860); in *Herb. Paris*.

**Delsman, Hendricus Christoffel**

(d. 1969, Netherlands).



**\*Dennis, L. H. and G. D. Blaxland**

collected 125 strains of sugarcane in *E. New Guinea*, near Milne Bay, in the *Louisiade Archipelago*, *Trobriand Is.*, *d'Entrecasteaux Is.*, and along the NE. coast of New Guinea to Buna, in 1908. The collection was made on behalf of the Colonial Sugar Refining Co of Australia.<sup>1</sup> It is unknown to me whether dried specimens were made.

LITERATURE. (1) *Cf.* Hawaiian Plant. Rec. 55, 1958, p. 213; Cane Growers' Quart. Bull. 15, 1951, 39.

**\*Dentan, R. K.**

An anthropologist from New York, made currently ethnobotanical collections in Perak, *Malay Peninsula*, in 1962 (Feb. 8–20, Apr. 6–28).

He was assisted by KADIM BIN TASSIM (see there).

**Deschamps, Louis Auguste**

ITINERARY. Add: In vol. 1 the itinerary of the Voyage is referred to BILLARDIÈRE. DESCHAMPS sailed in the 'Recherche' and the dates from his MSS are a little different from BILLARDIÈRE's, i.e. *Waigeou* (Aug. 16–27, 1793), *Bouro* (Sept. 3–16).

COLLECTIONS. Add: Notwithstanding the fact that the British Government had paid the prize-money for D.'s captured collection, Sir JOSEPH BANKS promised him to send it to France by the first opportunity. In spite of BANK's efforts, these scientific collections were never returned to France as far as known.<sup>2</sup> The MSS at Saint-Omer (France; see HOCQUETTE *sub* Biogr. Data) must be copies of the BM collection of MSS or the reverse.

LITERATURE. (5) Add: *Cf.* Sir GAVIN DE BEER: 'The Sciences were never at War' (1960) p. 122–129.

(7) *Cf.* also A. GUILLAUMIN: 'Deschamps botaniste herborisant en Nouvelle Calédonie en 1793' (Bull. Mus. Nat. Hist. Nat. 3<sup>e</sup> sér. no 47, 1972, Bot. 3, p. 85–87).

BIOGRAPHICAL DATA. M. HOCQUETTE: 'Louis-Auguste Deschamps 1765–1842. Sa vie—son oeuvre' (Bull. Trimestr. Soc. Acad. Antiq. Morinie, Mémoire, 39, 1970, 77 pp., 10 pl.).

**\*Diederix, Dirk Oebele Jan**

(b. 1923), in 1963 Assistant Palynologist with Brunei Shell, Seria. He accompanied H. P. FUCHS on a trip to Badas F. R. in *Brunei*. Plants were collected with FUCHS (see there) collecting numbers.

**Dilmy, Anwari**

Add: In 1968–69 for one year in Europe, studying new methodologies of ecology. After his return Rector of the University at Bandjermasin (Kalimantan).

COLLECTING LOCALITIES. 1963. *Bali*: Mt Agung (Oct. 1–17); *E. Java*: G. Baung (Oct. 21).—1964. *Bali*: Mt Agung<sup>1</sup> and limestone hill Prapat-Agung (Mar. 9–Apr. 9).—1965. *Bali* (July).

COLLECTIONS. Add: *Herb. Bog.*: 89 nos *Bali* 1963, collected with Dr. TARNAVSKI (Rumania) and Prof. JACOVLEV (Sovjet Russia); 120 nos *Bali* 1964,<sup>1</sup> with MADE TAMAN and NEDI.

LITERATURE. (1) A. DILMY: 'Pioneer Plants found one year after the 1963 Eruption of Agung at Bali' (Pac. Sc. 19, 1965, p. 498–501).

**\*Dissing, Henry**

(1931, Hansted, Denmark; x) was educated at the University of Copenhagen (B.Sc.), later Assistant at the Mycological Institute. He specializes in Fungi (genus *Helvella*).<sup>1</sup> From July 16–Sept. 5, 1962, he participated in the Danish 'Noona Dan Expedition' (see there for Itinerary, Collections, etc.).

LITERATURE. (1) *Cf.* Dansk Bot. Ark. 25 (1966) p. 1–172.

**\*Dizen or Dizon**

collected some tens of plants at Quezon City, *Luzon*, P.I.

**\*Dockrill, Alick William**

(born in a suburb of Sydney, N.S.W., Australia) had a job in the Lae Herbarium, but returned to N. Queensland; author of numerous papers on Australian orchids; he did some general botanical collecting in the NGF series in the Morobe and Sepik districts of *New Guinea*; in *Herb. Lae*, dupl. elsewhere, also in *Herb. Edinb.*

**Docters van Leeuwen, Willem Marius**

(d. 1960, Leersum, U., Netherlands).

COLLECTING LOCALITIES. Delete: *Bali etc.* 1918.

LITERATURE. (4) must be deleted.

BIOGRAPHICAL DATA. Vakbl. Biol. 40, 1960, p. 85–86; Proc. Linn. Soc. Lond. 172, 1961, p. 131–132; Studenten Almanak Amsterdam 1961, p. 240–241, portr.

**Docters van Leeuwen-Reynvaan, Jenny**

(d. 1963, Amersfoort, U., Netherlands).

**Donk, Marinus Anton**

(d. 1972, The Hague, Netherlands).

**\*Dornstreich, M. D.**

made an ethnobotanical collection in the Territory of *New Guinea*, >246 nos, numbered in the NGF-M.D.D. series. East Sepik region was visited in Sept. 1968.

COLLECTIONS. In *Herb. Lae*; some dupl. in *Leyden Herb.*

**Doux, J. A. le, see LEDOUX, J. A.****\*Dozy, Jean Jacques**

(1908, Rotterdam, Holland; x), geologist educated at Leyden University (Ph.D. 1935); in the same year he entered the service of the B.P.M. (Royal Dutch Oil Co.), being stationed respectively in Dutch New Guinea (1936–early 1937), Guatemala (1937–39), Ecuador (1949–43), Persia (1944), U.S.A., Venezuela (1946–47), The Hague (Holland), Indonesia (1949–54), and since May 1955 in The Hague as Head of the Exploration B.Int.P.M.

In 1936 he accompanied COLIJN's expedition to Carstensz Mts, *West New Guinea* (for itinerary *cf. sub* F. J. WISSEL, who took care of botanical collecting).

COLLECTIONS. 18 Alpine plants from Carstensz Mts in private herbarium, brought home for his wife. The collection is occasionally on loan for study in Leyden Herbarium, and will in the future be presented to that institution.

## \*Dransfield, John

(1945, Liverpool, England; x) graduated at Gonville and Caius College, Cambridge (1967 B.A., 1st class in Botany); Sept. 1967–Sept. 1968 research on the Malayan palms *Eugeissona* and *Johannesteijsmannia* in Malaysia, stationed at the Univ. of Malaya, Kuala Lumpur; research on the



DRANSFIELD

above palm genera in the Botany School at Cambridge, under the supervision of E. J. H. CORNER, Oct. 1968–Sept. 1970; Ph.D. Univ. Cambridge Dec. 1970. In October seconded by the British Government to the Indonesian Government under the Technical Cooperation Programme of the Colombo Plan, to work in the Lembaga Biologi Nasional, Bogor, Indonesia, at least up till Sept. 1972.

He is doing taxonomic research into rotans and other palms, and most of his publications deal with palms.<sup>2</sup>

**COLLECTING LOCALITIES.** 1967. *Malay Peninsula*. In Oct. Selangor, Perak, Johore; Selangor (Nov.); Negri Sembilan, Selangor in Dec.—1968. In Jan. Selangor, Cameron Highlands; Taman Negara and Pahang (G. Tahan)<sup>1</sup> with T. C. WHITMORE (Feb.–mid Mar.). *Sarawak and Brunei* (Bako National Park, G. Mattang, Bintulu, Andalau, Tutong) (mid-Mar.–Apr.). *Malay Peninsula*: in May G. Blumut, Johore, with T. C. WHITMORE; Selangor; Kledang Saiong and Lumut in Perak, and Fraser's Hill in Pahang in June; Johore and Selangor in July; Trengganu, Selangor in Aug.—1970. *Indonesia, W. Java* (several times in Kebun Raya): Tjibodas (Oct. 11, 15); Janlappa F. R. and Djasinga (Oct. 17); Tjibodas (Oct. 24);

Langkong, distr. Sukabumi (Nov. 13); Tjiletuh (G. Handjuang F. R. Distr. Sukabumi) (24–26); Telaga Warna and G. Geger Bintang (Dec. 6); Pelabuan Ratu (11), Tjibodas (15), G. Salak (Tjiturug) (20), Tjisolok (22), Tjibodas (25).—1971. Tjibodas (Jan. 8); Tjibalanac, Tjipatudja, distr. Tasikmalaja. *S. Sumatra*: Kepahiang, Tjurup (Feb. 12–13); Lampong Distr.: Waikambas (16), Karang(b)erak S of Kota Agung (20–22). *W. Java*: Situ Patengan (27), G. Tangkuban Prahur (28); *E. Java*: Nglijep, G. Tengger, Sumber Berantas (Mar. 15–20); *W. Java*: Nature Reserve Depok to hunt for *Orania* (24), Pelabuan Ratu (27), G. Salak (ridge above Tjiomas; Apr. 3); Udjong Kulon (Apr. 12–22); Dungus Iwul, Djasinga (May 15); Pelabuan Ratu (22). *Kalimantan Timur* (= *E. Borneo*): Balikpapan, Samarinda, Kutei Nature Reserve (May 26–June 24). *W. Java*: G. Pangrango (July 3); Lengkong and Tjiletuh, distr. Sukabumi (July 15–18); G. Salak, gorge above Tjiapus (25). *N. Sumatra*: Atjeh (mid-Aug.–Sept.) with a Japanese expedition.—1972. *Centr. Sumatra*: Tjagon Alam, Berbak near Nipah Pandjang, Djambi; trip from Djambi, via Bangko to Sg. Penuh, then to Kaju Aro tea estate, Barisan Range; waterfall on Btg. Sangir, lower slopes Mt Kerintji and Danau Bento; returned to Tapan and Bt Tinggi to Padang; with E. DE VOGEL to *S. Sumatra*: Lampong Districts and S. Bencoolen. With E. DE VOGEL to *SE. Borneo*.

**COLLECTIONS.** Largely palms, but occasionally flowering plants and many bryophytes, lichens and Fungi. In *Malaya nos* 450–922; in *Indonesia* from 950 onwards (in July 1971 up to 1779). From *Malaya* 1st set in *Kew*, dupl. to *Ithaca, Leyden, Kepong, Singapore, Univ. of Malaya*; from *Indonesia* 1st set in *Herb. Bog.*, dupl. in time to *Leyden, Kepong, Singapore, Univ. of Malaya*.

**LITERATURE.** (1) J. DRANSFIELD & T. C. WHITMORE: 'A Podostemaceae new to Malaya. *Indotristicha malayana*' (*Blumea* 18, 1970, p. 152–155, pl. 1, fig. 1).

(2) J. DRANSFIELD: 'The Javanese palm flora, first impression' (*Berita Biologi* 1, pt 3, 1971, p. 21–25); 'The genus *Johannesteijsmannia* H. E. Moore Jr' (*Gard. Bull. Sing.* 26, 1972, p. 63–83).

**Drescher, Friedrich Carl**

(d. Dec. 19, 1957, Djakarta, Indonesia).

**BIOGRAPHICAL DATA.** *Treubia* 24, 1958, p. 131–134, portr.

**Druce, George Claridge**

Add: In the same year he visited India, Ceylon, China, Korea, and Japan.

**BIOGRAPHICAL DATA.** Add: Cf. H. NEWMAN CLOKIE: 'An Account of the Herbaria of the Dept. of Botany in the University of Oxford' 1964, p. 49–52; bibliogr. in *Rep. Bot. Soc. and Exch. Club Brit. Isles* for 1931, p. 804.

**Dumont d'Urville, Jules Sébastien César**

**LITERATURE.** (4) Add: For drawings of the Botany of the Coquille see CL. NISSEN, 'Die botanische Buchillustration', 1951, vol. 2, p. 53 sub DUPERREY.

## \*Dunstone, E.

collected few numbers in the NGF series; *Herb. Lae*.



**Durant, C. L.**

(see Cycl. Fl. Mal. I, 1, 1950) is credited with the collecting of some *Ficus* specimens in *Java*.

**\*Duuren, G. J. van**

collected *Loranthaceae* in the vicinity of Ukua Estate, via Kairuku, *Papua*, at least between 1961–63.<sup>1</sup>

COLLECTIONS. In *Brisbane Bot. Dept.* and in *Herb. Univ. Queensl.*

LITERATURE. (1) Cf. B. A. BARLOW: 'Contributions to a knowledge of the Loranthaceae of New Guinea' (Proc. R. Soc. Queensl. for 1963, 75, 1964, p. 13–18, 3 fig.).

**Dwyer, R. E. P.**

(d. Oct. 3, 1959, Sydney, Australia) was finally Director of Agriculture, Stock and Fisheries, Territory of *Papua*.

BIOGRAPHICAL DATA. *Papua & New Guinea Agric. J.* 12, 1959, p. 47–48, portr.

**\*Dyhrberg, A. S.**

Danish zoologist who was for several years employed at the Zoological Museum of Indonesia at Bogor. Later Chief Display Division of the National Museum of Canada at Ottawa. At present Director of the Zoo at Copenhagen.

COLLECTIONS. Collections of botanical material made during his employment in *Indonesia* were made in co-operation with Dr KOSTERMANS and with staff instructed by him at *P. Dua*, and Udjong Kulon, *SW. Java*. Files, data etc. according to Mr DYHRBERG have been kept by KOSTERMANS. D.'s specimens scrappy and mostly thrown away. 2500 plants from *Sumatra* (KOSTERMANS never collected there) were presented to *Copenhagen* in 1961; I have no information on the state of the collection.

**Dijkstra, F.**

of the Forestry Service, New Guinea, cf. P. VAN ROYEN 1961.

**\*Dzamo**

a Papuan who collected some numbers in the series of T. G. HARTLEY (see there).

**Edaño, Gregorio E.**

(d. 1960).

COLLECTING LOCALITIES.<sup>1</sup> Add: *Sulu* and *Jolo* (Feb. 1957); collecting till 1959.

COLLECTIONS. He collected mosses too.<sup>2</sup> Also dupl. in *Herb. Edinb. (Philip. Is.)*, partly with J. SINCLAIR.

LITERATURE. (1) For the main collecting places cf. Philip. J. Sc. 89, 1960, p. 285–286.

(2) Cf. A. NOGUCHI in Sc. Rep. Tohoku Univ. ser. iv (Biol.) 29, 1963, p. 145–151, 23 fig.

BIOGRAPHICAL DATA. Philip. J. Sc. 89, 1960, p. 283–286, portr.

**\*Eddowes, Peter**

Utilization Officer, New Guinea, made collections from various parts of *Papua* and *New Guinea*, in the 1960s, a.o. islands in Milne Bay Distr.; *Herb. Lae*.

In 1968 attached to the Forest Products Research Centre, Department of Forests, Hohola, Port Moresby, *Papua*.

**\*Eddy, Alan**

in charge of the mosses in the British Museum, joined an expedition to the Finisterre Mts etc. in 1964–65 (see sub A. C. JERMY and others). He was to collect mosses, liverworts, and lichens, but might have collected some phanerogams. In 1969 he accompanied Dr A. C. JERMY on an expedition to *Central Celebes* (Latimodjong Mts) and *S. New Ireland* (Bismarck Archipelago).

**Eder, M. P.**

(Suppl. Cycl. Fl. Mal. I, 5, 1958, p. cclxxiv) is probably identical with EDEN (Cycl. Fl. Mal. I, 1, 1950); collected in the FB series.

**Edwards, Joshua Price**

(d. Feb. 21, 1966).

Finally Director of Forestry, Federation of Malaya; retired in May 1953.

BIOGRAPHICAL DATA. *Mal. For.* 15, 1952, p. 177, portr.; *ibid.* 29, 1966, p. 3–5.

**\*Edwards, P. J.**

collected with P. J. GRUBB (see there) in *E. New Guinea*, 1970–71.

**Eechoud, Jan Piet Karel van**

(d. 1958, Hollandia, New Guinea).

**\*Ehrendorfer, Friedrich**

(1927, Vienna, Austria; x), botanist educated at Vienna University (Ph.D. 1949), and attached to the Botany Department there from 1949–64 (Assistant, later Keeper). From 1955 teaching Systematic Botany, in 1962 Extraordinary Professor in Vienna. Visited the U.S.A. in 1952 and 1959. End 1964 Ordinary Professor at Graz University and from 1965 Head of the Institute for Systematic Botany and Director of the Botanic Garden, University of Graz; from 1971 Professor at Vienna University.

In Sept. 1964 he was awarded a Senior Fellowship of the Australian Academy of Science and a travel grant, which did materialize only in the 2nd half of 1966.<sup>1</sup>

His main interests are systematics, phylogenetic affinities and evolutionary patterns. The outcome of his studies resulted in several papers.

He made numerous excursions in Europe and the Mediterranean.

COLLECTING LOCALITIES.<sup>1</sup> 1966. En route visiting Thailand, *Singapore* (Aug. 16–20), collecting during various excursions on the island. From Queensland paying a visit (Aug. 30–Sept. 11) to *Papua* and *New Guinea*: around Lae, Goroka, Wau, Bulolo and Port Moresby.

COLLECTIONS.<sup>1</sup> Mostly made in Australia, but also in Thailand and Malesia (see above), New Caledonia, and Ceylon. His *Singapore* plants are numbered 6600/1301 to 6600/1905; the *New Guinea* plants from 6600/3901 to 6600/5713. At present in the Botanical Institute, but private; presumably the 1st set will go to *Vienna*; many duplicates.

LITERATURE. (1) Cf. Fl. Mal. Bull. no 22, 1968, p. 1539–1540.

**\*Eichler, Hansjoerg**

(1916, Ravensburg, SW. Germany; x), botanist, educated at Berlin, Vienna and Halle Universities

(Dr. rer. nat., Halle 1950; Ph.D., Adelaide 1959). From 1936–43 he worked in the Berlin Museum, from 1944–53 in the Kaiser-Wilhelm-Institut für Kulturpflanzenforschung at Vienna; in 1953 a guest at the University of Parma, and from 1954–55 a guest at the Rijksherbarium Leyden, revising Malesian *Ranunculaceae* with a German research grant. Since 1955 Keeper of the State Herbarium of South Australia, Adelaide. In 1973 Curator of the C.S.I.R.O. Herbarium, Canberra.

**COLLECTING LOCALITIES.** 1965. *Territory of New Guinea*: Aiyura (Apr. 15), Kainantu (15–16), Gabari near Lae (18), Keglsugl-Mt Wilhelm (22–28), Tomba, along Mt Hagen-Wabag road (30), Kubalis, Wabag-Laiagam road; Lake Iviva; Lagaip-Kandep divide (May 1), Merimanta; Lake Birip (2).

**COLLECTIONS.** Collected widely in Central and Southern Europe, but lost first collection (about 8000 nos) in Berlin, 1943; new collection c. 19,000 of which c. 7000 are Australian. About 100 *New Guinea* plants, nos 18186–18287, in *Herb. Lae* and *Adelaide*. Selected dupl. were sent to other herbaria.

#### Elbert, Johannes

**LITERATURE.** (3) Add: Cf. also B. HAGEN in Peterm. Geogr. Mitt. 56,<sup>1</sup> 1910, 306–308, w. ill. and map.

\***Elleh**, Saju, see Forest Dept North Borneo.

#### Elmer, Adolph Daniel Edward

Add: Collected in California prior to 1903.

**COLLECTIONS.**<sup>8</sup> *Herb. Edinb.*: dupl. *Philippines*.

**LITERATURE.** (8) A fairly complete set of some 10,000 handwritten original field notes is among the Reliquiae Bartlettianae at Michigan. (5549–6768 very incomplete, 6917–6961, 7037–18480, 20003–22694), obtained from ELMER's widow. MERRILL made typed copies of the nos 7037–18477, presumably at Berkeley, Harvard, and Kew.

**BIOGRAPHICAL DATA.** Add: In J. H. THOMAS, *Flora S. Cruz Mts California*, 1961, p. 35, photogr. p. 33.

#### \*Elsener, Adolf

(1932, Ibach-Schwyz, Switzerland; x) amateur botanist who studied theology; in the Franciscan Order. From 1961 stationed in different localities in West Borneo as 'Pater Agatho'. He is an excellent plant photographer and occasionally has made herbarium specimens, although lack of time of late (*vide* letter of June 1969) prevents these activities.

**COLLECTING LOCALITIES.** 1964. *W. Borneo (Kalimantan)*: NE. G. Raja, Njaumkop, 700 m (Aug. 15, Sept. 14).

**COLLECTIONS.** In *Herb. Leyden*, small collection.

#### \*Elsworthy, G.

Cape Rodney, Papua; is mostly interested in orchids, but also collected *Gesneriaceae* and a few other plants.

**COLLECTING LOCALITIES.** 1962. *Papua*: Edie Creek, 2 weeks in Musa Mts (Oct.–Dec.) (Owen Stanley Range).

**COLLECTIONS.** 400 nos living orchids in Edinburgh Botanic Garden.

#### \*Enoch, I.

from the Botany Department University of Malaya, collected in Pahang (1954), with J. CARRICK (see there) in *Sarawak* (1959). Possibly on several occasions.

#### Enriquez, Colin Metcalfe (Dallas)

Add: (b. 1884).

#### Enriquez, Gloria L.

graduate student of zoology, later working on microbiology in the U.S.A.

#### Ernst, Alfred

(d. 1968, Zürich, Switzerland).

**BIOGRAPHICAL DATA.** Vierteljahrsschr. Naturf. Ges. Zürich 113, 1968, p. 371–371a, 417–418; Fl. Mal. Bull. no 23, 1969, p. 1669; Verh. Schweiz. Naturf. Ges. 1969, p. 267–268; Österr. Akad. Wiss. 119, 1970, p. 337–342.

#### Esche, H.

of the Indonesian Forest Service (see Suppl. Cycl. Fl. Mal. I, 5, 1958, p. cclxxvii).

**COLLECTING LOCALITIES.** Add: 1953. *W. Borneo* (Nov.): subdistr. Semitau, at Sintang; subdistr. Upper Kapuas, village of Nanga Njaban.

**COLLECTIONS.** *Herb. Bog.*: *W. Bornean* plants; Malesian dupl. in *Herb. Leyden* (> 100).

#### Eschscholtz, Johann Friedrich

**BIOGRAPHICAL DATA.** Add: Occ. Pap. Calif. Ac. Sc. no 20, 1943, p. 27–28.

#### \*Esmade, F.

Superintendent Tungao Operation.

**COLLECTING LOCALITIES.** *Mindanao*: Agusan.

**COLLECTIONS.** In *U.S. Nat. Herb. Wash.*

#### Espinass, Anachto

(see Suppl. Cycl. Fl. Mal. I, 5, 1958) numbered in the FB series.

#### \*Espiritu, Rogelio A.

(1938, Sta. Cruz, Manila, Philippines; x) joined the National Museum, Philippine National Herbarium, in 1960 as Botany-Aide. From 1963 onwards he accompanied H. G. GUTIERREZ, D. R. MENDOZA, P. A. CORDERA, R. DEL ROSARIO, M. JACOBS, and E. J. REYNOSO on collecting tours in the *Philippines*. No field numbers of his own.

#### \*Evans, G. B.

collected ferns<sup>1</sup> on Ipoh Temple limestone (Perak) and on Bt. Takun in Selangor, *Malaya*, early 1966. Possibly ferns only.

**LITERATURE.** (1) Cf. CHIN SEE CHUNG: 'The limestone Flora of Malaya' (Academic exercise, Univ. Malaya 1973, p. vii).

#### Evans, Ivor Hugh Norman

(delete the asterisk in Suppl. Cycl. Fl. Mal. I, 5, 1958).

(b. 1886, Cambridge, England) came to South-east Asia in 1910 in the service of the Chartered Company of British North Borneo. In April 1912 appointed Assistant Curator and Ethnographical Assistant at the Perak Museum, Taiping, *Malaya*;

from 1920 Ethnographer at the Federated Malay States Museum. After his retirement (1932) he settled for a time in Suffolk, but returned to Kota Belud in Borneo in 1938, resuming serious anthropological work with a study of the religion of the Dusuns; interned during the war. After 1945 the greater part of his life was spent in Labuan, but following 1946 he returned for a period to Kota Belud.

**COLLECTIONS.** From at least 1914 onwards in Malaya, partly with FMS nos.

**BIOGRAPHICAL DATA.** Sarawak Mus. J. 8 (n.s. 11), 1958, p. xviii-xx; J. Mal. Br. R. As. Soc. 33, 1960, p. 109-110.

**\*Everaarts, Ary Pieter**

(1950, Maassluis, Z.H., Netherlands; x) student in tropical horticulture at the Agricultural College Wageningen, made collections during a study-stay in Indonesia.

**COLLECTING LOCALITIES.** 1972. *W. Java* (April): Tjipanas, Lembang. *SE. Kalimantan (Borneo)*: Meratus Mts, G. Sarempaka, together with E. F. DE VOGEL.

**COLLECTIONS.** *Java* plants, nos 1-110 in *Herb. Bog.*, dupl. in *Leyden* and *Wageningen*. *Borneo* plants, nos 1585-2142 in ser. DE VOGEL, in *Herb. Bog.*, dupl. in *Leyden* and *Wageningen*.

**Everett, Alfred Hart**

Add: (1848, Norfolk I., Pacific; 1898, London, England), whose father ran a Penal Colony, sailed with the family to England about 1851.

He first interested CHARLES HOSE in collecting and studying (C. F. COWAN *in litt.* Feb. 12, 1968).

**COLLECTIONS.** Add: *Herb. Edinb.*: plants from *Natuna Is* (1893).

**BIOGRAPHICAL DATA.** Add: Novit. Zool. 5, 1898, p. 606; A. A. PRESTWICH, I name this parrot . . . , 1963, p. 33-34.

**\*Everett, B.**

returned to the U.K. in August 1970 after a year at Kepong (1969-70) as a volunteer under the British Service Overseas arrangements. He spent much of his time collecting and helping prepare drafts for the Tree Flora of Malaya.

**Everett, Harold Hart**

(d. c. 1932, London), younger brother of ALFRED HART EVERETT. Primarily a planter and anthropologist. He settled in Sarawak about 1871, where he pioneered planting Cutch. Joined by ERNEST HOSE, 1896 (C. F. COWAN *in litt.* Feb. 12, 1968).

**\*Ewart, J. W.**

collected some plants from *P. Penang* (Sept. 24, 1938); bad material in *Herb. Sing.*

F and FA numbers from Sarawak, see Fl. Mal. Bull. no 21, 1966, p. 1433.

**\*Faber, P. J.**, see Boswezen Nieuw Guinea.

**\*Fabia, M. P.**, see Forest Dept North Borneo.

**Fairchild, David Grandison**

**BIOGRAPHICAL DATA.** Add: *Huntia* 1, 1964, p. 71-78, portr., 79-102, bibliogr.

**Farquhar, William**

**BIOGRAPHICAL DATA.** Add: Portr. in Str. Times Annual for 1971, p. 60.

**FB nos**, see Forestry Bureau Manila.

**\*Fedorov, A. A.**

Curator of the Leningrad Herbarium, joined KOSTERMANS (see there) on a *Sumbawa* expedition in 1961.<sup>2</sup> Evidently he previously visited Ceylon.<sup>1</sup>

**LITERATURE.** (1) Author of 'The Dipterocarp Equatorial rain forest of Ceylon' (Trans. Mosc. Soc. Nat. 3, 1960, p. 305-332, 9 fig.; in Russian w. English summary).

(2) A. A. FEDOROV: 'Botaniceskie putesestvia Sovetskie botaniki v Indonezii' (Bot. Zhurnal 47, 1962, p. 1844-1849, 5 photogr.).

**Feen-van Benthem Jutting, W. S. S. van der**

Add: End 1964 she retired on pension, and was appointed Honorary Doctor of the Just. Liebig University at Giessen, Germany.

**BIOGRAPHICAL DATA.** Beaufortia no 130, vol. 11, 1964, 21 pp., w. portr. a. bibliogr.; in *Folia Civitates* (University of Amsterdam) 18,<sup>11</sup> 16 Jan. 1965.

**Finet, Achille Eugène**

**BIOGRAPHICAL DATA.** Add: *Adansonia* 2, 1962, p. 147-159, portr.

**Finlayson, George**

**COLLECTIONS.** Add: Dupl. *Mal. Penins.* in *Herb. Edinb.*

**Finsch, Friedrich Hermann Otto**

**BIOGRAPHICAL DATA.** Add: A. A. PRESTWICH, I name this parrot . . . , 1963, p. 34-35.

**FL numbers** are part of the CF series (Kepong) and must be cited as CF (see Fl. Mal. Bull. no 21, 1966, p. 1433).

**\*Flach, M.**, see Boswezen Nieuw Guinea.

**Flemmich, C. O.**

left Singapore under the Malayanisation scheme on Feb. 24, 1960, for Australia. He later returned to England.

*Shorea flemmichii* has been named after him.

**BIOGRAPHICAL DATA.** *Mal. For.* 23, 1960 p. 137.

**\*Flenley, John Roger**

(1936, Ormskirk, England; x), palaeo-ecologist, who graduated, B.A. in Botany, at Cambridge (1958); Ph.D. at Canberra (1968).<sup>1</sup> He was a member of the Cambridge Botanical Expedition to Ethiopia in 1957, and collected under Dr D. WALKER (see there) in *New Guinea*. He received a grant to visit Malaya in connection with pollen analysis. Lecturer in Biogeography, Department of Geography, University of Hull, England. He makes an investigation into Quaternary vegetational history in SE. Asia, performing field work in Indonesia, in 1972 accompanied by a Research Assistant R. J. MORLEY.

**COLLECTING LOCALITIES.** 1964-65. *Terr. of New Guinea*: Wabag region<sup>2</sup> and short visit to Mt

Wilhelm.—1969. *Malaya*: Tasek Bera (Feb.).—1972. *Indonesia*. *W. Java*: Jakarta (May 5), spending several weeks at Bogor Botanic Gardens, visiting swamps and lakes. Flying to *Sumatra* (June 10) with MORLEY and M. KOSIM KARDIN, a graduate biology student of Bandung as field assistant and interpreter. Sumatran swamps and lakes were studied, *viz*: *N. Sumatra*: Laut Tawar,



FLENLEY

Ronggurnihuta swamp, Lake Sipingan near Siborong-borong; *W. Sumatra*: Telaga Batu Plano near Bukittinggi; Rawang Biluluk, Talu Dalam, Telaga Danau Kacik (= Katjik), and Danau di Atas, all near Alahan Pandjang; *Central Sumatra*, Djambi: Danau Bento, and Danau Padang, in Kerinci (= Kerintji); Rawang Payo, Rawang Pulau Tengah, Rawang Sikijang, Rawang Bukit Bintang, all at Lologedang, Kerinci; Danau Gunung Tujuh, Kerinci; Danau Landah Panjang, and Danau Sati, G. Kerinci. *W. Java*: Situ Gunung, Ranoe Upas. Return to Bogor by Sept. 13, and to Britain on the 21st.

**COLLECTIONS.** *Herb. Univ. Canberra*, numbered in the ANU series (Aust. Nat. Univ.), ANU 2000–2900; dupl. in *Lae*, *Leyden*, *Kew*, *Arn. Arbor.* Ferns only sent to New South Wales. Plants from *Malaya* in *Univ. Kuala Lumpur*, *Kew*, dupl. *Leyden*.

In 1972 671 nos by R. J. MORLEY, J. R. FLENLEY & M. K. KARDIN, 1–647 from *Sumatra*, 648–671 from *W. Java*; in *Herb. Hull Univ.*, dupl. at *Leyden*, *Bogor*, *Kew*, *Sing.*, *Bandung*, *Arn. Arbor.* The *Sumatra* collection includes the first record of *Isoetes* for that island. Mosses were collected from all ecological sites, and also at Lake Toba and on G. Pangrango (*W. Java*).

**LITERATURE.** (1) On a thesis: 'The present and former vegetation of the Wabag region of New Guinea'.

(2) J. R. FLENLEY: 'The vegetation of the Wabag

region, New Guinea Highlands: a numerical study' (*J. Ecol.* 57, 1969, p. 465–490, 8 fig., 4 tab.).

#### \*Flood, I.

P. W. LEENHOUTS found a specimen of *Atalaya salicifolia* collected in *Timor*, in *Herb. Kew*. The specimen cited by DANSER (see *Cycl. Fl. Mal.* I, 1, 1950, p. 168a) is also at *Kew*. Probably both specimens were collected by the same man who possibly collected plants as a sideline only. At least no FLOOD is mentioned in the list of collectors whose plants are at *Kew* (*Kew Bull.* 1901, by B. D. JACKSON). The zoological collector FLOOD of the early 20th century will have nothing to do with it.

#### Forbes, Henry Ogg

**COLLECTIONS.** *Herb. Leyden*, add: 461 *New Guinea* plants (purch. 1888); *Herb. Leningrad*: *New Guinea* dupl.

His numbers run as follows: 1–137 (*Bantam*, *W. Java*), 138–166 (*Cocos Islands*, *Indian Ocean*), 167–602 (*Kosala*, *Bantam*, *W. Java*), 603–1441 (*W. Java*, by error marked *SE. Java*), 1442–1897 (*S. Sumatra*), 1898–2161 (*S. Sumatra*, *Blatau* region), 2162–2699 (*S. Sumatra*, *Pasumah* Lands), 2700–2911 (*S. Sumatra*, *Musi* region), 2912–3256 (*S. Sumatra*, *Upper Musi* region), 3257–3320 (*Moluccas*, *Amboina*), 3321–3419 (*Timor Laut Is.* = *Tanimbar Is.*), 3420–4159 (*Timor*, *Lesser Sunda Is.*); 1–955 (*Papua*).

**BIOGRAPHICAL DATA.** Add: *Ibis*, ser. 13, vol. 3, 1933, p. 135–136.

#### \*Forest Department Brunei<sup>1</sup>

P. S. ASHTON\*, and HASAN PUKOL collected on behalf of this department.

#### Forest Department North Borneo (Sabah)<sup>1</sup>

at Sandakan. To the list of collectors mentioned in *Suppl. Cycl. Fl. Mal.* I, 5, 1958, p. cclxxvii, add: AGIM BIN AMBULLAH, J. AMPURIA, ANGIAN, JAMES AWING, ABAN BEBOD, D. BRAND, A. BUNTA, CHARINGTON, J. CHONG, SAJU ELLEH, M. P. FABIA, A. GIBOT, A. HASHIM, P. HEE (1928), JASWIR, A. JAWANTING, KAMIS (1935), KANDILIS (1936), KAPIS BIN SISIRON & KILANG (MEIJER's collectors), HUJAH KABUN (1931), V. KINTED, KURIPIN, J. K. LAJANGAH, LEE KOH HAT (1935), LUNAU (1932), L. MADANI, S. MOHAMMED MAIDIN (1931, 1934), W. MEIJER\*, MICHAEL ANAK, G. MEKIL, MUIN BIN CHAI, M. A. MUJIN, NORDIN (w. SINGH), OTHMAN\*, PATRICK PING(KUN) (1938), ABDUL RAHIM\* (1949), MASIROM RUNDI, PATRICK P. SAM, SIKAJAT (1939), H. T. SINANGGUL, J. SINGH, PUTAN TIKAU, SUAH TINGGUAN, JAMES A. WING, Y. K. WONG, YASIN DANGI, ZEANO. There certainly will be many others.

#### \*Forest Department Sarawak

The herbarium of the Sarawak Museum is amalgamated with that of the Department. The numbering of the Department has been very confusing and it is recommended to read the article on it by P. S. ASHTON (*Fl. Mal. Bull.* no 21, 1966, p. 1432–1435).

(1) An asterisk refers to a separate entry with more particulars.

Recent (1960s) in the Forest Department: ARDZI BIN ARSHID, ARIFFIN, BOJENG BIN SITAM, HJ. BUJANG, DAN BIN HJ. BAKAR, GALAU, A. MUAS, ILIAS PAIE, RASHID BIN TAGGOT, ROSLI, REHAL, SAINUDDIN BIN BOLHASSAN, WASLI BIN HJ. SISI.

**Forest Research Institute, Bogor**

Add: JOENOS (or JUNUS DALI) (*Peutjang I.* near W. Java 1957; *S. Sumatra* 1958).

**COLLECTIONS.** Add: As to the numbering of wood samples taken with the herbarium specimens, and the list which makes it possible to match them, see *Fl. Mall Bull.* no 22 (1968) p. 1545–1546.

**Forest Research Institute, Kepong**

See *sub* Conservator of Forests series (*Cycl. Fl. Mal. I*, 1, 1950), KEP series (up to 1966), and the recent FRI series.

**Forestry Bureau, Manila, P.I.**

Add as collectors in the FB series: J. BALDEMOR (*Luzon* 1915), J. R. GILLIS (*Corregidor* 1920), J. LAZARO (1916), M. SIMEON (*Luzon* 1921).

**Forsten, Eltio Alegondas**

MIQUEL was wrong in ascribing a plant from *P. Dwars in de Weg* as collected by FORSTEN (*cf. Cycl. Fl. Mal. I*, 1, 1950, p. 179 *sub* LIT. 3). Rightly the plant was collected by J. C. VAN HASSELT and the original label of the collection was one of KUHLE & VAN HASSELT.

**Forstman, Miss A. G.**, see VORSTMAN, A. G.

**Fraga, Z. C.**

see *sub* E. J. REYNOSO, 1965.

**\*Frake, Charles O.**

collected some plants in the PNH (Philippine National Herbarium) series in 1957. Grasses and sedges only? From *Mindanao*.

**Frey-Wyssling, Albert Friedrich**

Dr. h.c. at Nijmegen, Netherlands.

**COLLECTING LOCALITIES.** Add: 1932. *Sumatra East Coast*: Sg. Pantjar.

**COLLECTIONS.** From above-mentioned localities in *Herb. Zürich* and *Leyden*.

**FRI nos**, see Forest Research Institute, Bogor.

**FRI series**

of the Forest Research Institute at Kepong replaced the KEP series in 1966.

**Friedberg, Claudine Berthe née, cf. sub BERTHE.**

**\*Frodin, David Gamman**

(1940, Chicago, Ill., U.S.A.; x) botanist, educated at the universities of Chicago (B.S. 1963), Tennessee (M.S. 1964), and Liverpool (M.Sc. 1965). In autumn 1967 he started work on a Ph.D. with Prof. CORNER at Cambridge University (England), concluding in Nov. 1970 with a thesis on *Schefflera*. From Oct. 1965 to Oct. 1966 employed in the Division of Botany, Lac, New Guinea, as a temporary scientific officer. Subsequently he visited a number of herbaria, and made short field trips in Australia and the Far East (up to June 1967). From February 1971 Lecturer in

Botany in the University of Papua & New Guinea at Boroko, near Port Moresby. In addition to teaching systematics and ecology, it is planned to continue studies on *Schefflera* and other *Araliaceae* and to publish a detailed account of collectors (1871–1942) in eastern New Guinea.



H. O. FORBES

Courtesy E. F. Greenwood, Keeper of Botany, City of Liverpool Museums.

**COLLECTING LOCALITIES. 1965.** *New Britain (Bismarck Archipelago)*: for 2 weeks (Nov.) with W. ZAVATTARD (a timber merchant) from Kandrian by boat along the S. coast to Gilnit on the Itni R., thence on foot across the island by way of Airagil-pua village to Borgen Bay and Cape Gloucester; side trip to Mt Tangis, reaching summit (1700 m) from the NE.; *New Guinea* (Morobe, Dec.): 1 week in the Bulolo-Wau area with D. J. HILL.—**1966.** 2½ weeks (Jan.) in the mid-Waua Valley (with J. BUDERUS) between Garaina and the Papuan border (lat. 8°S); collecting mainly near Wakaia village (*cf. T. G. HARTLEY*).—*New Britain* (Mar.–June), western part, for the greater part attached

to a survey from the Dept of Forests; a helicopter used to reach several localities. From base camp at *Malengelo I.* on S. coast, visiting: Johanna River near Whiteman Range; from Arawe base camp: lower Pulie River, upper Pulie River near Benim and Arawe Plantation (with E. E. HENTY), river E of Sauren (sago and *Casuarina* swamps in part), *Marklo I.* (in Arawe Is.) and Subdidi village



FRODIN (behind), in front from left to right: NAVA KWAPENA, Sister MARIETTA GARNIER, DAVID OLLERENSHAW, ANDREW YANIEB. U.P.N.G. Plant Systematics class, June 1972, Tapini Hotel, Central District.

(in limestone country); from base camp at Borgen Bay: Aisega village; from base camp at Eleanora Bay, N. coast: Mt Penck and vicinity (up to the summit, 600 m; a few distinctly montane species on windswept, foggy peak) as well as to a forest on limestone country some 20–25 km S of Cape Ruge. Proceeding (May 19) by air to Cape Gloucester after brief rest at Talasea; by boat and foot to Sag Sag, whence again climbing Mt Tangis as well as Mt Talawe (1900 m); return to Cape Gloucester (June 1–2) and thence to Rabaul (2–4), visiting Keravat briefly; return by air to Lae (4).—*New Guinea (Madang)*: mid-June 1½ weeks in lowland forest and grassland around Aiome (near former station of the Neu-Guinea Kompagnie, Arumene on the Ramu R.). Southern Highlands District (July–Sept.); *Doma Peaks Expedition* (5 weeks): proceeding via Mt Hagen to Tari by air; by land-over to Tigibi and thence on foot to base camp

Ibiwara, joining VINK and KALKMAN (see there, also for literature). FRODIN spent 3 weeks at Lei bivouac (2800 m) and 2 weeks at Habono bivouac (2200 m). Sepik Distr. (Sept.). By air from Tari (with VINK and KALKMAN) to Telefo(l)min, proceeding on foot to the limestone Hindenburg-Dap Range; camp for 1 week at c. 2400–2450 m; returning by air to Lae via Wewak and Madang. In Nov. day-trip with C. E. RIDSDALE to Markham Point near Lae (*Nepenthes*).—1967. *Malay Peninsula* (Apr.): a few collections around F.R.I. Kepong and day-trip to new road to G. Ulu Kali, E of Kuala Lumpur.—1971. *Papua*. First half of the year in the vicinity of Port Moresby and on the Sogeri Plateau, partly with Mrs A. N. MILLAR as well as with students; field trip (June 19–25) to Kerau, about 12 km due NE. of Tapini, 2200 m alt. (area generally N of the region examined by the 1st Archbold Exp. 1933–34, i.e. the strip from Mt Tafa through Ononge to Mt Albert Edward; field trip to Bulolo-Wau area (4 days, end of Aug.); to Musgrave R., near Iawarere, and along road between there and Koitaki.—1972. *New Caledonia* (1st week Jan.); first half of year in vicinity of Port Moresby, *Motupore I.* in Bootless Inlet (Field Station of Univ. P. & N.G.); Owen's Corner with R. PULLEN (June, day trip); participation on Mt Suckling Expedition (see P. F. STEVENS, J. F. VELDKAMP, R. PULLEN, etc.) (June 20–July 4); from Biniguni ascended to Maiyu I and Maiyu II camps and to the summit region of Mt Sewie (2 days on top, 3000 m), return by the same route. *Trobrind Is.*: *Kiriwina* (Oct. 26–Nov. 9), base camp at Kaibola in the north.—1973. *Bismarck Archipelago* (Jan. 13–Feb. 8): *Gazelle Peninsula* (Kerevat, Vudal, Bainings Road) in *New Britain* (Jan. 14–17); *New Ireland* (Jan. 18–Feb. 2): Danfu and vicinity, Namatanai, ascending Lelet Plateau (1000 m) from E. coast near Dalum and staying 4 days at Lemkamin Aid Post, Kavieng and visit to the islands of *Nusa* and *Nusalik* offshore with B. N. TOREU; *Manus* (Feb. 2–8): Lorengau, by launch to Derimbat (N. coast) and inland to Kari (400–500 m), and return to Derimbat and Lorengau.

COLLECTIONS. *Herb. Lae*: some 1700 nos in the NGF series (incl. 26201–27000, 28101–28500, 32001–32200, 28501–28549; others jointly with E. E. HENTY, C. E. RIDSDALE, J. BUDERUS), of which c. 800 collected in *New Britain*. The few collections from the *Malay Peninsula* in *Herb. Kep.* (in FRI series).

Special attention paid to *Araliaceae* and *Lauraceae*.

Later collections in Port Moresby, with UPNG nos, ranging from 500–1000, 2001–2200, 4001–4190, Dupl. distributed from Port Moresby to Lae, Leyden, Canberra, Kew and B.P. Bish. Mus.

Froggatt, John Lewis

Add: (1891, Sydney, Australia; x) was educated at Sydney University (B.Sc. 1913); temporary officer under Dept of Agriculture, N.S.W., 1913–18; appointed Entomologist, Queensland Dept of Agriculture and Stock, Brisbane, in October 1920, resigning August 1929, to take up a position as



entomologist to the Mandated Territory, New Guinea.

BIOGRAPHICAL DATA. In Bibliogr. Austr. Entom. 1775–1930, 1932.

**\*Frohne, Gertrude**

collected plants in *Leyte (Philippines)* in August 1957; numbered in the PNH series, *Herb. Manila*.

**Fruhstorfer, Hans**

(d. 1922, Munich, Germany).

COLLECTIONS. Add: Bryophytes from *Celebes (1895)*, also in *Herb. Edinb.*

BIOGRAPHICAL DATA. Add: The Entomologist 55, 1922, p. 144; in MUSGRAVE, Bibliogr. Austr. Entom. 1775–1930, 1932.

**\*Fuchs, Hans Peter**

(1928, Basle, Switzerland; x) studied botany and geography at the University of Basle (1948–58), taking his Ph.D. (1958) on the taxonomy of the genus *Isoetes*. After a year in the National Herbarium of the Smithsonian Institution at Washington, he joined the Bataafsche Internationale Petroleum Maatschappij, The Hague, and was transferred in 1961 to the Kon. Shell Exploratie en Produktie Laboratorium at Rijswijk as Research Palynologist. He participated in the Symposium on Ecological Research in Humid Tropics Vegetation at Kuching, Sarawak, in July 1963,<sup>1</sup> and extended his stay to NW. Borneo (see below). Early 1967 he spent 4 months on the Pacific coast of Columbia, S. America. At present living at Trin-Dorf, near Chur, Switzerland.

*Rhododendron fuchsii* H. SLEUM., and *Pandanus fuchsii* H. St. JOHN, etc., are named after him.

COLLECTING LOCALITIES. *Malaysia*. 1963.<sup>1</sup> *Sarawak*: Mt Santubong (July 7), Semengoh F. R. and limestone hills at Bau (10). *Brunei*: Seria-Badas peat-swamp forest and Badas F. R. (12). *Sabah*: Mt Kinabalu, W. route (14–19) at Kambaranga Relay Station and Paka Cave, Mt Kinabalu Low Peak; Penosok Plateau (21–25), partly with H. SLEUMER, W. MEIJER, and Mrs COLLENETTE, at Mesilau Cave, Tenompok, etc.; Andulau F. R. (31, with J. MULLER); Seria to Badas F. R. with D. O. J. DIEDERIX (Aug. 1). *Brunei*: Lumut Hills (2). *Sarawak*: Long Palau, B. Tinjar (7); Lobok Pasar, B. Baram (9–10); Marudi F. R. (10); Bt Subis, S. Niah (13); Bt Lambir, Miri (16); Bt Pasu, Tubau Valley (20–21). *Sabah*: Mt Kinabalu, E. route, partly with Mrs COLLENETTE: Tenompok (27), Kundasan-Mesilau Cave (28), to Janet's Halt (29), to Sheila's Plateau (30), Shangri La Valley, N. side of the mountain (31), Goking's Valley (N. side) (Sept. 1–6), Penosok Plateau (8); Mesilau Cave-Kundasan (8); Sheila's Plateau to Mesilau Cave (4–7, Mrs COLLENETTE alone, with FUCHS numbers).

COLLECTIONS. Nos 21000–21682; first in *Herb. Shell Lab. Rijswijk*, now in private herbarium; dupl. distributed through Leyden to *Leyden*, *Kew*, *Sarawak*, *Arn. Arbor.*, *Geneva*, *Canberra*, *Bogor*, *Wash.*, *Copenh.*, *Stockh.*, *Paris*.

LITERATURE. (1) For the field excursions of the UNESCO Symposium, see Kuching Symposium 1963, 1965, p. 274–287 (trips 10–17 July 1963).

**\*Fujioka, M.**

at the time Head of the Department of Agriculture, Tokyo Imp. Univ., collected in the *Malay Peninsula*, e.g. at Port Swettenham in 1929. Specimens in *Herb. Fac. Agr. Tokyo Univ.*



FUCHS

**\*Fukuoka, Nobuyuki**

a member of the *Kyoto University Biological expedition* to Thailand and Malaysia, 1967.

ITINERARY. See sub K. IWATSUKI.

COLLECTIONS. 1st set in *Herb. Kyoto*, 2nd in *For. Herb. Bangkok*.

**Furtado, Cactano Xavier Dos Remedios**

Add: Pensioner, re-engaged Botanist, ceased to work for the Botanic Gardens, Singapore, in August 1960. He has continued to work, however, at the Botanic Gardens on an assignment for the Sarawak Government; later supervising Colombo-plan Fellows.

COLLECTING LOCALITIES. Add: 1937. G. Baling, Kedah (June 4).

**\*Gabot, V., see Philippine National Herbarium.**

**\*Gadon anak Umbai**

collected in the KL series (see there) of the Phytochemical Survey of the Federation of Malaya.

**\*Galau, see Forest Dept Sarawak.**

**Galoengi, Karo-Karo Sinoelingga**

(d. Dec. 17, 1956).

**\*Galore, Michael**

(1935, Wedau, SE. New Guinea; x), Technical



Assistant with the Division of Botany at Lae, New Guinea; onwards of about 1972 Keeper of the Herbarium.

COLLECTING LOCALITIES. *E. New Guinea*, at least onwards of 1962.—1967. With RIDSDALE, SOEGENG, etc. on the Border Expedition in *W. Papua*. In the same year? islands in Milne Bay.

COLLECTIONS. In the NFG series, *Herb. Lae*. Also dupl. in *Herb. Edinb.*, partly collected with P. J. B. WOODS and CRUTTWELL.

**Gandrup, Jens Johannes Sørensen**

BIOGRAPHICAL DATA. Add: Naturh. Tid. 8, 1944, p. 46–47, portr.

**Gaudichaud-Beaupré, Charles**

LITERATURE. (1) Add: For botanical drawings of the voyage of 'L'Uranie et La Physicienne' see CL. NISSEN, 'Die botanische Buchillustration' 1951, vol. 2, p. 65.

(3) Add: For botanical drawings of the voyage of 'La Bonite' see CL. NISSEN, 'Die botanische Buchillustration' 1951, vol. 2, p. 65–66.

(5) Add: B. C. STONE: 'Gaudichaud's species of Pandanus in the atlas of the botany of the voyage of 'La Bonite'' (Mal. Sc. 5, 1970, p. 14–19, pl. 22).

BIOGRAPHICAL DATA. Add: Adansonia sér. 2, 11, 1971, p. 405–424 + portr. (new data on life and work).

\***Gaynar, E.**

collected in the CF series (see Conservator of Forests in Cycl. Fl. Mal. I, 1, 1950) in Selangor in 1922. Probably no regular collector.

\***Geer, Louis de**

COLLECTIONS. *Herb. Stockholm*: some 50 nos from Poentjak, *W. Java* (May 1965).

\***Geh Siew Yin, Miss**

collected orchids and other plants together with Miss LEE WAI CHIN, and with SAMSURI.

COLLECTING LOCALITIES. *Malaysia*. 1970. *Pulau Langkawi* (Dec. 3–6); Kaki Bukit, Perlis (6); Maxwell Hill, Perak (7–10); Penang Hill, *Penang* (11).—1972. *P. Tioman*, Bt Penak (Sept. 17–18).

**Gibbs, Lilian Suzette**

LITERATURE. (2) Add: For the reconstruction of her route in the Arfak Mountains see W. VINK in *Nova Guinea*, Bot. 22, 1965, p. 485–486.

\***Gibot, A.**, see Forest Dept North Borneo.

**Gilliard, Ernest Thomas**

(d. Jan. 26, 1965, New York, U.S.A., after a meeting).

Author of a paper on New Guinea (Nat. Geogr. Magaz. 1951, p. 669 seq.).

BIOGRAPHICAL DATA. Auk 83, 1966, p. 416–422, w. portr. & bibliogr.

**Gilliland, Hamish Boyd**

(d. June 1965, aged 54, ? Pietermaritzburg, S. Africa).

In 1965 he took up a professorship at Pietermaritzburg, S. Africa.

Author of botanical papers.<sup>1</sup>

COLLECTING LOCALITIES. Add: 1956. *Sarawak*: Bako Nat. Park (May 16–22).—1960. *NE. New Guinea*:<sup>2</sup> Chimbu and Daulo Pass. Borneo?

LITERATURE. (1) H. B. GILLILAND: 'Plant Communities on Singapore Island' (Gard. Bull. Sing. 17, 1958, p. 82–90); 'Common Malayan Plants' (Singapore 1958); *Flora of Malaya*, vol. 3 (grasses); and several other papers, partly on grasses, and Borneo plants.

(2) Cf. Fl. Mal. Bull. no 18, 1963, p. 990.

BIOGRAPHICAL DATA. Nature 207, 1965, p. 808; Gard. Bull. Sing. 22, 1967, p. 107–112, incl. portr. a. bibliogr.

\***Gillis, J. R.**, see Forestry Bureau, Manila.

\***Gillison, Andrew N.**

was transferred from the Department of Agriculture to the Department of Forests, 1964. Ecologist at Lae, New Guinea.

His interests are mainly ecological, but he is currently (1967) teaching botany at the Forestry School, Bulolo. He is working on Melanesian *Diospyros*.

COLLECTING LOCALITIES. *Papua*: Port Moresby region, *Louisiade Archip.*, *Trobriand Is.*, *d'Entrecasteaux Is.*, and *Conflict group*.—1966. Accompanied part of the 'Leyden-Lae Doma Peaks Expedition'<sup>1</sup> to the Southern Highland Distr. (see also KALKMAN and VINK); later replaced by D. G. FRODIN. He was not on the Andutakim.—?1967. Islands of Milne Bay Distr. with M. GALORE and P. EDDOWES.

COLLECTIONS. In the NGF series, *Lae*; dupl. distributed to other herbaria, incl. *Herb. Edinb.* His special interest is *Diospyros*.

LITERATURE. (1) A. N. GILLISON: 'Plant succession in an irregularly fired grassland area—Doma Peak region, Papua' (J. Ecol. 57, 1969, p. 415–428, 4 fig., 2 photogr.); 'Structure and Floristics of a montane grassland/forest transition, Doma Peaks region, Papua' (Blumea 18, 1970, p. 71–86, photogr. 1–8, fig. 6).

**Gjellerup, Knud**

LITERATURE. (7) Add: For annotations on the Arfak route (Apr. 19–May 16, 1912), see W. VINK in *Nova Guinea*, Bot. 22, 1965, p. 485, fig. 5.

\***Glasse Lindenbaum, Shirley Helen**

(1933, Melbourne, Australia; x), B.A. Melbourne, and 2 years post graduate work in anthropology at Sydney University. She made an anthropological field trip to the Eastern Highlands of Australian New Guinea, together with Dr R. M. GLASSE in 1962–63, to study the social structure and ecology of the Fore, with special reference to 'kuru', a neurological disorder suffered by the people. About 1966 she remarried, her new name being LINDENBAUM, and lives in New York.

COLLECTING LOCALITIES. 1962–63. *Austr. New Guinea*: South Fore Census Division of the Okapa Sub-District, Eastern Highlands.

COLLECTIONS. NGF nos 15626–15672 in *Herb. Lae*; 321 items were identified in the field by Dr WOMERSLEY.<sup>1</sup>

LITERATURE. (1) The full list is contained in a mimeographed paper entitled 'A Note on Fore Medicine and Sorcery'.

## \*Godlee, T.

Forest Officer who collected some specimens on the Upper Clay River off Kerama River, Sepik, April 1960; in *Herb. Lae, Leyden, etc.*

## Goebel, K. von

BIOGRAPHICAL DATA. Add: 'Ein deutsches Forscherleben in Briefen 1870–1932'. Herausgegeben von E. BERGDOLT, Berlin 1940, 273 pp., portr.

## Goering (or Göring), Philip Friedrich Wilhelm

COLLECTIONS. Add: Japanese orchids in *Herb. v. RÖMER*, were described by G. REICHENBACH (Bot. Zeit. 3, 1845, p. 333–335).

## \*Gonzales, Jose Salvador

The orchid *Dendrobium gonzalesii* QUIS. has been named after its first collectors, Mr & Mrs J. S. GONZALES.

## Graeffe, Eduard

Add: Author of 'Samoa oder die Schifferinseln' (Hamb. Mus. Godeffroy 1873).

## Grassl, Carl Otto

(1908, Menominee, Mich., U.S.A.; x). Add: A.B. and A.M. from the University of Michigan, 1932 and 1933.

COLLECTING LOCALITIES. *USDA Sugar Cane Expedition, 1957*.<sup>1</sup> *Austr. New Guinea* (Mar. 15–end of Apr.): between Laloki and Brown Rivers near Port Moresby, Warida R., Sepik R., Ramu R., Erap R., Markham R., Tauri R., Kaisenik near Wau, Snake R., Bulolo-Lae Rd, Gogol R., Madang, near Wewak, Bainyik etc. near Maprik (Sepik drainage), Sepik R., Nondugl, Purari drainage, Baiyer R., Kikori drainage; *Dutch New Guinea* (May): Manokwari, Wosi R., Anadi R., Bami R., Sorong, Ransiki, Anggi Lakes, Biak, Wissel Lakes, Merauke, Hollandia; *Austr. New Guinea* (fortnight in early June): Ramu R., Bainyik near Maprik (Sepik drainage), Sepik R.; *New Britain*: Keravat; *Solomon Is* (8 days, mid-June): *Guadalcanal, Florida I., Buka I.*; *Austr. New Guinea* (10 days): *New Britain*, near Keravat; Ego, near Mekeo; Popondetta.

COLLECTIONS.<sup>1</sup> *Andropogoneae* from *New Guinea*, specimens made from flowering living plants, will be deposited in the specialized herbarium at *Canal Point, Florida*. Earlier collections from Canada, and Michigan, in *Herb. Un. Michigan*; *Andropogoneae* from Centr. America and E. Africa in Nat. Herb. Wash. and in Florida.

Large living collections of *Saccharum* from *New Guinea in Canal Point, Florida*.

LITERATURE. (1) J. N. WARNER & CARL O. GRASSL: 'The 1957 Sugar Cane Expedition to Melanesia' (*Hawaiian Plant. Rec.* 55, 1958, p. 209–236, f. 1–14, App. A–G, incl. map).

## Gray, Edward Charles Gordon

Later Senior Forest Officer, stationed at Port Moresby, Papua. He further collected on Brown River (1955), Mt Lawes near Port Moresby (Apr. 1956), and with E. J. H. CORNER at Waitape (Aug. 1960).

## Grevenstuk, Antonie

(d. 1973, Baambrugge, N.H., Netherlands).

## Griffith, William

COLLECTIONS. Add: Also dupl. in *Herb. Edinb.*

## Groenhart, Pieter

(d. 1966, Leyden, Netherlands).

BIOGRAPHICAL DATA. Fl. Mal. Bull. no 21, 1966, p. 1371, 1377; Persoonia 4, 1966, p. 69–71, w. portr. a. bibliogr.

## Groot (van Embden), Cornelis de

BIOGRAPHICAL DATA. Add: Bijdr. Taal-, Land- en Volkenk. 14, 1958, facing p. 129.

## \*Grubb, Peter John

(1936, Ilford, England; x) was educated at Magdalene College, Cambridge University, B.A. (1st Class Hons) 1957, Ph.D. 1961.

University Demonstrator (1961–64) and Lecturer (1964–). He made ecological expeditions in the Balkans, S. America, Australia and Solomon Is. (1963), and to Japan, Australia, New Zealand, and U.S.A. (1970–71).

COLLECTING LOCALITIES. 1970. *Malaya*: G. Ulu Kali, Cameron Highlands (with T. C. WHITMORE); Jalang Mersing, Kluang, Johore, and G. Belumut (Sept. 20–25). *E. New Guinea* (Oct.–Dec. & Apr.–July 1971); Mt Kerigomna and Fatima Basin (Marafunga sawmill) in Eastern Highlands.

COLLECTIONS. *Herb. Cambr.* In *Malaya* collected for mineral analysis and anatomical studies. *New Guinea* collections numbered P. J. GRUBB & P. J. EDWARDS, c. 380 fertile numbers (distributed to *BM, Lae, Canb., Leyden*) and c. 2000–2300 sterile and unicates kept in *Cambr.*

## Guillou, Elie Jean François le

BIOGRAPHICAL DATA. Add: in Bibl. Austr. Entom. 1775–1930 (R. Zool. Soc. N.S.W. 1932, p. 135).

## Gutierrez, Hermes G.

Add: (1933, Laoag City, Luzon, P.I.; x) joined the Philippine National Herbarium (Bot. Dept of the National Museum) in 1954, and was later appointed Museum Researcher in Botany and subsequently Chief of the Botany Division. He was educated in Botany at the University of the Philippines (B.S.), the Arnold Arboretum (Harvard University) (1963–64), and the University of Santo Tomas (M.S., and working for Ph.D. in 1968). Lately especially interested in *Dipterocarpaceae*.

COLLECTING LOCALITIES. Add: 1957. With G. E. EDANO.—1960. Hundred Islands, Pangasinan (*Algae*): *W. Java*: Udjong Kulon, Mt Panggarango, Tjibodas (with KOSTERMANS and UNESCO Training Group).—1961. *Batan Is.*, Batanes and Babuyan (with QUISUMBING, see there, and R. DEL ROSARIO); Sierra Madre Mts, Isabela, Luzon (Apr. 17 – May 28).—1962. *Leyte*: Mt Lubi, Dagami & Balinsasayao F. R., Abuyog; *Malaya*: Ulu Kelantan Limestone Hill (with H. KENG and UNESCO Training Group).—1963. *Palawan*: Lipuun Point, Quezon, with R. ESPIRITU.—1965. Ethnobotanical collecting in *W. Mindoro* (Mar. 8–20); trip in *Basilan* with E. J. REYNOSO and Z. C. FRAGA; with Dr AARON SHARP & Dr Z. IWATSUKI on Mt Canlaon, *E. Negros* (May 25–29),

and in *SE. Samar* (May 30–June 28) with E. J. REYNOSO; Mt Pulog, Benguet, *Luzon*.—1966. With REYNOSO in Mt Guiting-Guiting, *Sibuyan I., Romblon*.—1969. *S. Samar* (May 5–June 3)<sup>1</sup>; Mt Concord, Hinabangan and Mt Apoy, Llorente, with R. A. ESPIRITU and E. J. REYNOSO. *Mindanao*, Davao: Mt Apo (Nov. 19–Dec. 20), with E. J. REYNOSO and F. R. DE LA CRUZ, K. SETO, and



H. G. GUTIERREZ

others of the Osaka Museum of Natural History.—1970. *S. Samar*: Mt Sohoton (Mar.–Apr.) with D. A. MADULID, R. A. ESPIRITU, E. J. REYNOSO and F. DE LA CRUZ.<sup>2</sup>—1973. *N. Luzon* (April).

**COLLECTIONS.** Add: Appr. 1500 field numbers in 1968; dupl. distributed to *Leyden*, *Kew*, *Arn. Arb.*, *Sing.*, *U.S. Nat. Mus.*, *Bogor*, etc. The collection from Mt Apo (1969) shared equally at the *Osaka Mus.* and *Nat. Mus. Manila*.

**LITERATURE.** (1) *Cf. Fl. Mal. Bull.* no 24, 1969, p. 1786–1787.

(2) *Cf. ibid.* no 25, 1970, p. 1892.

**Gwynne-Vaughan, David Thomas**

**COLLECTIONS.** Add: The Curator of the Aberdeen University Herbarium recently (1973) came on a field note-book given to Prof. W. G. CRAIB by Dr O. STAPP, at one time curator of the Kew Herbarium. It has been returned to *Kew*; it lists plants collected during the 1899 Skeat Expedition in the *Malay Peninsula*, nos 200–639 with informative notes.

\***Haas, A. de**

collected *Digitaria timorensis* (KUNTH) BALANSA

in 's Lands-fokkerij Padang Mangatas near Pajakombo (*Sumatra West Coast*) in Mar. 1922. In *Herb. Bog.* > 5.

**Hachisuka, Masauji**

**COLLECTIONS.** Add: Evidently at least some phanerogams too.

**LITERATURE.** Add: (2) *Cf. M. HACHISUKA*: 'The Birds of the Philippine Islands' (London 1931). List of collected ferns (27) and phanerogams (19) on p. 71–73.

**Haenke, Thaddäus Peregrinus Xaverius**

Add: Among his MSS (in Madrid, fasc. 15–16) are short botanical notes, partly from the Philippines, which however, may partly originate from L. NÉE.<sup>6</sup>

**COLLECTIONS.** Add: Part of the Lambert Herbarium collection (Mexico and *Philippines*), sold 1842, is now at *Kew* (*cf. Taxon* 19, 1970, 524).

**LITERATURE.** (1) Add: For itinerary in *Alaska* *cf. Bot. Not.* 1940, p. 297; for itinerary in *Luzon* *cf. J. KÜHNEL l.c. below sub BIOGR. DATA*, p. 79.

(2) Add: R. E. HOLTTUM: 'A commentary on some type specimens of ferns in the Herbarium of K. B. Presl (Nov. Bot. Inst. Bot. Univ. Carol. Prag. 1968, p. 3–57) (see also review by C. V. MORTON in *Amer. Fern J.* 60, 1970, p. 119–123).

(6) R. GICKLHORN: 'Unbekannte botanische und zoologische Forschungsergebnisse von Thaddäus Haenke' (*Verh. Zool.-Bot. Ges. Wien* 103/104, 1964, p. 215); 'Neue Dokumente zu Beginn der Forschungsreisen von Thaddäus Haenke' (*Phyton* 14, 1972, p. 295–308).

**BIOGRAPHICAL DATA.** Add: in HEMSLEY & HOOKER, *Biol. Centr.-Amer.* 4, 1887, App. p. 119–120; *Occ. Pap. Calif. Acad. Sc.* no 20, 1943, p. 13; J. KÜHNEL: Thaddeus Haenke, Leben und Wirken eines Forschers, München 1960, Veröff. Collegium Carolinum Bd G, incl. portr., bibliogr., maps, letters, etc.; *Verh. Zool.-Bot. Ges. Wien* 103/104, 1964, p. 213–222, 2 fig.

**Haenseler, Felix**

Add: (1767, Durrach, Bavaria, Germany; 1841, Malaga, Spain) was certainly *not* in *Malacca* himself. He was a correspondent of MERTENS, AGARDH, WEBB, etc. He collected extensively in Spain and exchanged materials with botanists outside Spain. The plants cited from *Malacca* must be cited either *ex Herb. HAENSELER*, or more probably from *Malaga*!

**BIOGRAPHICAL DATA.** *Bot. Zeit.* 4, 1846, p. 305–313.

**Hagen, B.**

Add: He collected in *Sumatra* at least up to 1891.

**Hagerup, Olaf**

(d. 1961, Copenhagen, Denmark). He retired in 1959.

**BIOGRAPHICAL DATA.** *Taxon* 10, 1961, p. 25–26, 177–178, 201–204, portr., bibliogr.; *Dansk Bot. Ark.* 21, 1963, p. 63, 133–135 (bibliogr.).

\***Hainsworth, Cecily Joan**

(1936, Perth, W. Australia; x) got linguistic training at the Summer Institute of Linguistics,

Australia; one year linguistic and anthropological studies at the University of Western Australia. With a co-worker, KATHLEEN JOHNSON, Linguists with the Summer Institute of Linguistics, Ukarumpa, Territory of New Guinea, for the Narak language, compiling a Dictionary.

**COLLECTING LOCALITIES.** In the 1960s. At Tabibuga in the Jimi River Valley of the Western Highlands of *East New Guinea*.

**COLLECTIONS.** Some 80 specimens in *Herb. Lae*. In 1968 continued collecting was planned. Plant collecting has been done to identify plants for the dictionary.

**\*Hamad**

His name occurs on labels as CURTIS' collector, e.g. in *Langkawi Is.* (July 1892).

**\*Hamilton, Miss L.**

now Mrs READ at Lae; in 1956 stationed at Okapa, Eastern Highlands, *New Guinea*, as a Nutritionist with Public Health Department.

**COLLECTIONS.** About 230 *nos* (no good specimens); in *Herb. Lae*, and sent to various institutions for identification by specialists, to Leyden in 1958. Mainly useful plants from Papua gardens; partly with *C nos*, partly in the NGF series.

**\*Hanevelt, Miss A. D.**

collected plants in the Cameroon Highlands, *Malaya*, at 4000 ft, in 1937: *Herb. Sing.*

**\*Hardie, J.**

**COLLECTIONS.** *Java* plants in *Herb. Edinb.* (on permanent loan from Glasgow Univ. Herb. since 1957).

**\*Harland, William Aurelius**

(?, Scarborough, England; Sept. 12, 1858, Hongkong), a colonel surgeon, M.D. Edinburgh 1845, first in China, and in Hongkong since 1848.

*Harlandia* HANCE and some other plants have been named in his honour.

**COLLECTIONS.** *Herb. Kew:* plants from China and Hongkong. In the *Brit. Museum* specimens also, including *Cyperus compactus* from *Singapore*, collected in Maio (May) 1857.

**BIOGRAPHICAL DATA.** Biogr. Index BRITTEN & BOULGER, 2nd ed. by RENDLE, 1931; BACKER, Verkl. Wordenb. 1936.

**\*Harrison, R.**

In the 1950s Cadet Agricultural Officer stationed at Nondugl, *Territory of New Guinea*. He made a small collection of weeds and pasture plants; in *Herb. Lae*.

**Hart, Alexander John**

**COLLECTIONS.** Add: Dupl. in B. P. Bish. Mus. *Herb. Honolulu*.

**\*Hartley, Thomas Gordon**

(1931, Beaumont, Texas, U.S.A.; x) graduated in botany (B.S. 1955, Wisconsin State University; M.S. 1957, Ph.D. 1962, University of Iowa). From 1961–65 leader of C.S.I.R.O. Phytochemical Survey of New Guinea; 1965–71 Associated Curator of the Arnold Arboretum, Harvard

University, Cambridge, U.S.A.; 1971– present Senior Research Scientist, C.S.I.R.O., Division of Land Research, Herbarium Australiense, Canberra, Australia.

He revised the genera *Flindersia* and *Zanthoxylum*.

**COLLECTING LOCALITIES.** 1961. *Territory of New Guinea:* Morobe District (from Dec. 16),



HARTLEY

vicinity of Lae, in Markham Valley, Gurukor, Butibum R., Lae Botanic Gardens.—1962. Same localities near Lae and Oomsis Creek, Lake Bed below Red Hill, beach near Malahang; S and N of Mumeng, Lake Wanum, above Busu R.; *Papua:* between Brown and Laloki R. (Feb. 20); *Terr. of New Guinea:* vicinity of Lae, a.o. at Yalu, Bulolo, Edie Creek Rd, Zenag, Bewapi Creek, Burep R., Leron R., Bunga R., N and S of Garaina, Sopa near Garaina Singaua; *Papua:* Laloki R. (Sept. 5), 2 miles E of Rouna (6), below Rouna Falls (7), Kakoda Rd (10), E of Rouna (11), Laloki R. E of Sogeri (11–12), E of Rouna (13), Brown R. (15), Kakoda Rd (17), Laloki R. 15 miles NE of Port Moresby (21), 1½ miles E of Subitana (24), Musgrave R. (25); *Terr. of New Guinea:* same localities in vicinity of Lae and besides at Crooked Creek SW of Bulolo, Patep R., Lae-Bulolo Rd.—1963. Beach area NE of Lae, between Busu and Butibum Rivers, Mt Salawaket (= ? Saruwaged) (Jan. 19–26), localities near Lae, track between Tymne and Wagau (Mar. 12–18, 21), Kuali Creek (26–Apr. 8), S of Wau, Bulolo River Gorge, Kaisenik, Bulldog Track above Edie Creek, Mt Kaindi SW of Wau (May 8–9), vicinity of Lae; Kainantu Subdistr., Eastern Highlands (July 3–Aug. 11); Kratke Range S of Aiya, Eastern Highlands (Aug. 12); near Lae, Morobe District;

Kainantu Subdistr., Eastern Highlands (Nov. 26–28); Morobe Distr., e.g. Mt Shungol (Dec. 10–17) 5 miles SW of Wagau, partly in his series collected by C. D. SAYERS (Dec. 16–18).—1964. Morobe Distr. (Jan. 7, 8, 10, by C. D. SAYERS) till Feb. 8; Papua: Mt Dickson, Gailala Subdistr. (Feb. 9–14); *Terr. of New Guinea*: near Lae (some numbers by DZAMO; Okapa Subdistr., Eastern Highlands (Sept. 24–30), Goroka Subdistr., Eastern Highlands (Oct. 9–14).—1972. Morobe Distr.; Eastern Highlands District.

COLLECTIONS. 3750 TGH nos (9600–13305, 13655–13699), partly collected by C. D. SAYERS and a few by DZAMO; 1st set in *Lae*; dupl. in private herb., Canberra, *Harv. Bot. Mus.*, Leyden, GRAY Herb., Nat. Herb. Wash., Brisbane, and Kew.

Other collections were made in the U.S.A., Puerto Rico, New South Wales & Australian Capital Territory.

**\*Hasan Pukol**

collected on behalf of Forest Dept Brunei.

**\*Hashim, A.**, see Forest Dept North Borneo.

**Hasselt, Johan Coenraad van**

LITERATURE. (3) Under J. G. S. VAN BREDA add: For particulars on the drawings see CL. NISSEN, 'Die botanische Buchillustration' 1951, vol. 2, p. 22 *sub* BREDA.

**Hatusima, Sumihiko**

Add: made a joint expedition from Kagoshima University Japan and the National Science Museum at Manila, P.I. in 1964.<sup>1</sup> He was accompanied by M. SATO, a botany student of Kagoshima University, and by the Philippine assistants F. MERCADO and A. ZABALA.

COLLECTING LOCALITIES. 1964. *N. Philippines*: after a visit to Manila, collecting 8 days in Batan I.<sup>1</sup> and 4 in Camiguin (Nov.). In *Batan I.* collecting on Mt Iraya, along the coast of Song-song Bay, on the rocky cliff between Basco and Mahatao, and in the valley behind Mahatao.

COLLECTIONS. 1054 nos *Philippines*, totalling 2122 specimens.

LITERATURE. (1) S. HATUSIMA: 'An Enumeration of the Plants of Batan Island, N. Philippines' (Mem. Fac. Agr. Kagoshima Univ. 5, 1966, p. 13–64, 5 pl., 1 fig., map).

H. INOUE: 'A small collection of liverworts from Isl. Batan, the Philippines' (Hikobia 4, 1965, p. 272–276).

T. SHIN: 'A small Collection of Mosses from Isl. Batan, the Philippines' (Hikobia 4, 1965, p. 263–271, 1 fig.).

BIOGRAPHICAL DATA. Portr. in HATUSIMA, *Flora Ryukyus* 1971, p. 69.

**Haviland, George Darby**

COLLECTIONS. Add: Dupl. from *N. Borneo* (1891–95) in *Herb. Edinb.*

**\*Heaslett, Dr E. A.**

In 1970 in the Geography Dept Univ. of Singapore.<sup>1</sup>

COLLECTING LOCALITIES. 1970. *Malaya*. He led the Herbarium staff of the Singapore Botanic Gardens on day trips to G. Pantii (July 5); to the

rivers Bantan (May 31), Juasseh (June 28, Sept. 6), and Panjang (July 19) in the Labis Distr., Johore; to Jalang Mersing, Kluang, Johore (Oct. 4).

COLLECTIONS. *Herb. Sing.*

LITERATURE. (1) Author of 'Gunong Chabang Tiga: a note on a small area of montane Ericaceous forest in Johore' (Mal. Nat. J. 23, 1970, p. 149–154, 1 fig.).

**\*Hee, P.**, see Forest Dept North Borneo.

**\*Heel, Willem Albert van**

(1928, Leiden, Z.H., Netherlands; x), plant morphologist who attended the University at Leyden (Ph.D. 1966). In 1956 appointed at the Rijksherbarium. He made a study tour to Java, for collecting suitable material for his research.

Author of morphological papers.

COLLECTING LOCALITIES. 1969. *Java* (Apr.–Aug.), mainly in Hort. Bog.

COLLECTIONS. Mostly pickled, but also some dried material in *Herb. Leyden*.

**Heide, Frits Ferdinand Rudolf**  
(d. 1957).

BIOGRAPHICAL DATA. Add: Dansk Bot. Ark. 21, 1963, p. 64, 145–146 (bibliogr.).

**\*Heider, Karl Gustav**

(1935, Northampton, Mass., U.S.A.; x), anthropologist, educated at Harvard (B.A. 1956, M.A. 1959) and Vienna (1957–58). Instructor in Anthropology, Harvard University 1965–66 (Ph.D. 1966).<sup>1</sup> Assistant Professor at Brown University, Rhode Island, 1966 onwards. Attached to the Peabody Museum of Harvard Expedition as Cultural Anthropologist, making ethnographic studies in *Irian* (former Dutch New Guinea).

COLLECTING LOCALITIES. 1962. *W. Irian*: Grand Valley of the Balim, Central Highlands.

COLLECTIONS. 17 nos in *Herb. Leyden*, and in *Herb. Harv. Univ. Cambr.*

LITERATURE. (1) Author of an unpublished Ph.D. thesis: 'The Dugum Dani. A Papuan Culture in the West New Guinea Highlands' (1965). It would be revised as a book.

**Heinrich, Gerd**

LITERATURE. (1) Add: 'Celebes, Seltsame Jagd durch seltsames Land' (Berlin 1943).

**\*Henderson, Douglas Mackay**

(1927, Blairgowrie, Scotland; x) attended Edinburgh University (1944–48); Scientific Officer in plant virology, Dept of Agriculture and Fisheries for Scotland, 1948–50; from 1951 on the staff of the Royal Botanic Garden, Edinburgh; in 1970 Regius Keeper, succeeding Dr FLETCHER.

He made a world tour of Botanic Gardens and Herbaria in 1967.

Author of an account of the bryophyte flora of Norfolk Island (*Revue Bryologique et Lichénologique* 37, 1970, p. 657–661, with H. T. PRENTICE).

ITINERARY. 1967. *Malaya*: based in Kuala Lumpur (Aug. 13–20); *Singapore* (20–26); *Java*: Bogor (26–30), and Tjibodas.

COLLECTIONS. His tour was not a collecting trip, and the collections made (mostly rust fungi) are not numbered; in *Herb. Edinb.*

**Henrici, Henry Albert Baron**

(1782, Rome, Italy; 1838, Amsterdam, Netherlands), officer in Austrian regiments from 1800–1805 and from January 1817 captain in the Dutch army; major in the D.E.I. from 1825.\*

**LITERATURE.** (5) This is to replace partly incorrect or incomplete data in the Cycl. Fl. Mal. I, 1, 1950; cf. J. MACLEAN in Scient. Hist. 14, 1972, p. 59, who found the data in Rijksarchief in The Hague.

**\*Henty, E. E. (Ted)**

Animal Husbandry Officer, Department of Agriculture, E. New Guinea; in 1957 he joined the Division of Botany; in 1962 appointed Keeper of the Lae Herbarium.

He is especially working on New Guinea grasses<sup>1</sup>.

**COLLECTING LOCALITIES.** *Mandated Territory of New Guinea. 1949–54.* From Morobe, Eastern and Western Highlands Districts, mainly grasses.—1959. Okapa, Kainantu subdistr., Eastern Highlands Distr.—1960. See *sub* R. F. THORNE.—1963. Mt Piora (Mar. 9–13), Kainantu subdistr., with S. CARLQUIST.—1964. Sagarai Valley, Milne Bay environs, Milne Bay Distr.; Western foothills, Finisterre Mts, Madang Distr., with D. SAYERS.—1965. Telefomin, Sepik Distr.; *Rossel* and other islands, Milne Bay Distr.—1966. *West New Britain* (with D. FRODIN); Aiome, Usino, Dump, Madang Distr.; Kui, Morobe Distr.; Lake Trist (6000 ft), Morobe Distr.; with J. S. WOMERSLEY in Ramu Valley.—1967. *W. Papua*: foothills of the Star Mts with the Border Survey Party for a fortnight (see RIDSDALE and SOEGENG).—Probably at many more localities on many more dates.

**COLLECTIONS.** *Herb. Lae*:  $\pm 300$  under his own numbers, mainly grasses and weeds (1949–54, and some NGF numbers), later in the NGF series. Dupl. distributed by Lae; also in *Herb. Edinb.*

**LITERATURE.** (1) Author of 'A Manual of the Grasses of New Guinea' (1969); 'Weeds of coffee in the Central Highlands' (Bot. Bull. no 4, Terr. Papua & N.G. 1970, p. 1–22, 21 fig.).

(2) Cf. Fl. Mal. Bull. no 18, 1963, p. 989.

**Heringa, Jodocus**

Add to Cycl. Fl. Mal. I, 1, 1950 and Suppl. I.c. I, 5, 1958: (1844, Utrecht, Netherlands; 1907, Utrecht), military dispenser, educated at a military school at Utrecht. In 1865 or 1866 he was sent to the Dutch East Indies, being stationed at Padang in *West Sumatra*. His botanical interest focussed mainly on grasses. During his term of office in Indonesia (till 1894) he was transferred many times, but no collections from other places are known to me. In 1896 he opened a chemist's shop at Utrecht.

**COLLECTIONS.** According to his son, P. K. HERINGA, his father had a private herbarium which no longer exists.

**\*Hermens, M. C. L.**

(1925, Ambij, L., Netherlands; x) studied tropical silviculture at Wageningen Agricultural College. His study was interrupted from 1947–50, when he was serving for his number in the army in the then Dutch East Indies. At first he was stationed in Celebes, subsequently at Batavia, and

about mid-1948 transferred to Buitenzorg at his own request with the possibility to continue his agricultural studies there. He passed his final examination at Wageningen in January 1955 and got an appointment with the Dutch Forest Administration in Limburg.

**COLLECTING LOCALITIES. 1948–50. W. Java.** Mostly from Buitenzorg (Bogor) and vicinity; G. Gedeh, G. Salak; between Buitenzorg and Serang; vicinity of Bandung.



HENTY

**COLLECTIONS.** About 300 specimens, aiming at collecting at least 1 species, sometimes more, of each family occurring in Indonesia. Identified by Dr VAN SLOOTEN, ENDERT, a.o. In 1951 presented to *Herb. Wageningen*.

**Herre, Albert William Christian Theodore**

(d. 1962, Santa Cruz, Cal., U.S.A.).

**COLLECTIONS.** Also dupl. in B. P. Bish. Mus. *Herb. Honolulu*.

**BIOGRAPHICAL DATA.** Mandroño 16, 1961, p. 102–103, 1 fotogr.; Bryologist 65, 1962, p. 268–277, portr., bot. bibliogr.; Circ. Div. Syst. Biol. Stanf. Mus. no 10, 1964, p. 1–20, portr.

**Heurn, Willem Cornelis van**

(d. 1972, Wilp, Gld., Netherlands).

**Hewitt, John**

(d. 1961, Grahamstown, S. Africa).

**BIOGRAPHICAL DATA.** Add: S. Afr. J. Sc. 57, 1961, p. 312.

**\*Heyligers, Petrus Cornelis**

(1931, Gorinchem, Netherlands; x) was educated at Utrecht University, majoring in plant geography; Dr.'s thesis (1961, published 1963) on vegetation and soil of a white-sand savanna in Suriname.



Since October 1961 with C.S.I.R.O., Div. of Land Research, as plant ecologist in the New Guinea section. He carried out natural resources reconnaissance surveys, and more specialized research into the vegetation of monsoonal Papua.<sup>1</sup>

**COLLECTING LOCALITIES.** Eastern half of *New Guinea*. *Papua*: vicinity of Port Moresby (Aug. 1963); Solomon Is.: Bougainville (July–Aug. 1964); vicinity of Port Moresby (May–July 1965, Jan. 1966). *Terr. of New Guinea*: Sepik Distr. between Ambunti and Aitape (July–Sept. 1966). *Papua*: vicinity of Port Moresby (Apr., May, Aug. 1967, June 1968). *Terr. of New Guinea*: Sepik Distr. (Aug. 1968).

**COLLECTIONS.** *Herb. Canberra (CSIRO)*, in Aug. 1968 about 70 nos; numbers started with 1001, as he collected earlier in Suriname (1956–57).

**LITERATURE.** (1) Results of surveys published in the CSIRO Land Research Series.

P. C. HEYLIGERS: 'Observations on Themeda-Eucalyptus savannah in Papua' (Pacif. Sc. 20, 1966, p. 477–489, 7 fig., 3 tab.); 'Analysis of the plant geography of the semi-deciduous scrub and forest and the Eucalypt savannah near Port Moresby' (Pacif. Sc. 26, 1972, p. 229–241, 2 fig., 7 tab.).

#### Heyne, Benjamin

Add: He employed Indian draughtsmen during his years as Company's botanist on the Madras Establishment. He built up a large collection of flower paintings of which the India Office Library possesses, however, none. Many of his drawings passed to the second Lord CLIVE (Governor of Madras 1798–1803).<sup>9</sup>

**LITERATURE.** (9) Cf. M. ARCHER: 'Natural History Drawings in the India Office Library' (London 1962) p. 27, 28.

#### \*Higgings, Dr Joseph J.

employed at the U.S. Plant Introduction Station, Glenn Dale, Maryland. He accompanied H. F. WINTERS (see there) on an expedition to *New Guinea* in 1970.

#### \*Hill, Dr Ronald David

(1935, Wellington, New Zealand; x) graduated M.A. from Victoria University of Wellington (1961); Drs. University of Singapore (1965). On the staff of the Geography Department, University of Singapore.

**COLLECTING LOCALITIES.** 1969. *Singapore*. Bukit Timah Nature Reserve, in Jungle Fall Valley; Singapore Botanic Gardens.—1970. Bt Timah Nat. Res. (mid-Feb.–mid-June);<sup>2</sup> Botanic Gardens, Singapore 80-year old secondary forest, Johore.—1971. Planning to collect in fresh-water swamp forest.

**COLLECTIONS.** Up to 1971 > 370 specimens of tree species, exclusively in *Herb. Sing.*, H numbers.

**LITERATURE.** (1) R. D. HILL: 'Soil moisture under forest, Bukit Timah Nature Reserve, Singapore' (Gard. Bull. Sing. 26, 1972, p. 85–93, 3 fig., 7 tabl.).

#### \*Himsen, A.

collected some 20 *Graminae* and *Cyperaceae* from grass plains at Yambi, Sepik Distr., *Terr. of New Guinea*, in Jan. 1959; *Herb. Lae*.

#### Hinds, Richard Brinsley

**LITERATURE.** (3) Add: Drawings of the 'Botany of H.M.S. Sulphur' by Miss DRAKE.

**BIOGRAPHICAL DATA.** Add: In HEMSLEY & HOOKER, Biol. Centr.-Amer. 4, 1887, App. p. 128.

#### \*Hirano, Minoru

(1910, Shizuoka, Japan; x) graduated from the Faculty of Science, Kyoto University, in 1937. Professor of Yoshida College, Kyoto University Specialist in fresh-water *Algae*. During a collecting trip in Borneo he was accompanied by M. HOTTA (see there) and M. MATSUBARA (ethnology student).

**COLLECTING LOCALITIES.** See sub HOTTA.

**COLLECTIONS.** *Herb. Kyoto Univ.*, HIRANO & HOTTA nos 1–1656.<sup>1</sup> Probably several (? mostly cryptogams) in his own series. *Sarawak* dupl. in *Herb. Edinb.*

**LITERATURE.** (1) K. IWATSUKI: 'Ferns of Borneo, collected by M. HIRANO and M. HOTTA' I (Acta Phytotax. Geobot. 21, 1965, p. 91–100, 2 fig.); M. TAGAWA: 'Ferns of Borneo, collected, etc.' (*ibid.* 21, 1965, p. 173–180; 22, 1967, p. 183–191).

**H.M.B.**, see H. M. BURKILL, not to be used in citing.

#### \*Ho Coy Choke

collected plants on Mt Kinabalu, *Sabah*, at least in March 1964; H nos in *Herb. Kuala Lump.* Possibly during the 2nd Roy. Soc. Expedition (see CORNER).

#### Hochreutiner, Bénédicte Pierre Georges

(d. 1959, Geneva, Switzerland).

**BIOGRAPHICAL DATA.** Taxon 8, 1959, p. 81–83, portr.; Verh. Schweiz. Naturf. Ges. 139, 1959, p. 408–417, portr., bibliogr.; Candollea 17, 1959–61, p. 9–24, portr., bibliogr.

#### Holstvoogd, Coenraad

(d. 1967, Amersfoort, Netherlands).

#### Holtum, Richard Eric

Add: After a study tour to the U.S.A. etc. from Nov. 1959–May 1960, he paid a short visit to Bogor (Java) and Singapore.<sup>5</sup> In 1964 he was awarded the Gold Medal of the Linnean Society. He occasionally makes herbarium study tours round the world.

**LITERATURE.** (5) Cf. Report in Fl. Mal. Bull. no 15, 1960, p. 743–746.

**BIOGRAPHICAL DATA.** Add: Amer. Fern J. 59, 1969, p. 1–3.

#### Home, Sir James Everard

**COLLECTIONS.** Add: FORBES was right in attributing *Timor* plants to HOME. *Cynometra cauliflora* was collected at Coepang (May 1, 1843).

#### Hoogerwerf, Andries

Add: In 1959 appointed Scientific Officer of the Stichting Agrarisch Onderzoek t.b.v. Ned. Nieuw-Guinea (SAONNG). In charge of the investigation of the damage done by vertebrates (mainly aquatic birds) to paddy in the fields, and stationed at the



Rice Plantation Koerik, W of Merauke at the mouth of the Kumbé River, in Dutch South New Guinea; from October 1962 till April 1963 stationed at the Agricultural Experimental Station at Manokwari (Vogelkop). Mid-1963 he settled at Bakkum, N.H., in the Netherlands; he occasionally visits Indonesia.

Author of many ornithological publications and reports with information on the vegetation.

COLLECTING LOCALITIES. Add: 1951. *Prinseneiland-Krakatau* (Strait Sunda) (Sept.–Oct.).<sup>6</sup>—1953. *S. Borneo*: Kumain, Pangkalanbaru (Apr. 13–17); *N. Billiton pr.* Peganin (Apr. 20–22).—1954. *Bawean* (May–June);<sup>8</sup> *Kangean* (Aug.–Sept.).—1955. Strait Sunda and Udjong Kulon (*W. Java*) (June–July); *Karimondjawa* (Oct.–Nov.).—From 1950–56 several times in Udjong Kulon (*W. Java*),<sup>5</sup> and neighbouring islands in Strait Sunda.—1959–62. *South Dutch New Guinea*.—1971. *E. Java*: Baluran, Jang, Meru Betiri Nature Reserve (Oct.).

COLLECTIONS. Add: *Herb. Bog.: Prinseneiland-Krakatau* collection (1951); and part of the other collections which are for the greater part in *Herb. Leyden*.

LITERATURE. Add: (5) A. HOOGWERF: '8ste Verslag van tournée's naar het Wildreservaat Udjong-Kulon (21 November–9 December 1950)' (mimeographed, Bogor, Dec. 1950, 95 pp., 30 fotogr.); 'Verslag over in 1951 en 1952 naar het Natuurpark Udjong Kulon gemaakte dienst-tournee's' (mimeographed, Bogor, Apr. 1952, 19 pp., 31 fotogr., map); 'Udjong Kulon the land of the last Rhinoceros' (Leyden, Brill, 1970, 512 pp., 155 ill., 3 maps).

(6) A. HOOGWERF: 'Verslag over de expeditie naar het Natuurpark Pulau Panaitan (Prinseneiland) in Straat Sunda van 30 Augustus–5 October 1951' (mimeographed, Bogor, Nov./Dec. 1951, 143 pp., 32 fotogr., map); 'Verslag over een naar de Krakatau-groep gemaakte dienstreis van 5–15 October 1951' (mimeographed, Bogor, July/Aug. 1952, 184 pp., 32 fotogr.).

(7) A. HOOGWERF: 'Enkele gegevens over het vogelschadeonderzoek bij het Rijstproefbedrijf 'Koembe' te Koerik (nabij Merauke) Zuid Nieuw-Guinea' (subtitle: 'Some particulars on a research on harmful birds in ricecrops in south New-Guinea') (mimeographed, Bull. Agr. Research Stat., Manokwari, Agr. ser. no 7, 1962, with English summary).

(8) A. HOOGWERF: 'Notes on the Island of Bawean (Java Sea) with special reference to the birds' (Nat. Hist. Bull. Siam Soc. 21, 1966, p. 313–340, pl. 29–36; *ibid.* 22, 1967, p. 15–103, map).

#### Hoogland, Ruurd Dirk

Later Principal Research Officer C.S.I.R.O. Land Research; in 1968 he accepted the post of Senior Research Fellow in the Research School of Biological Sciences, Canberra. Early 1969 he visited Ceylon in connection with the Flora of Ceylon Project.

Author of a paper on Mt Wilhelm.<sup>1</sup>

*Evodiella hooglandii* VAN DER LINDEN has been named after him.

COLLECTING LOCALITIES. Add: *Territory of New Guinea*. 1959. Around Lac (Oct.–Nov.).—1960. Western Highlands (with R. SCHODDE)

(June–Sept.), Wabag area.—1961. with P. J. DARBYSHIRE in the Sepik Distr.: Aitape-Lumi area (July–Aug.).—1962. Not in New Guinea.—1963. Northern Division, *Papua*, Safia-Pongamia area (hardly collected, except specimens of *Torrenicola queenslandica* July 25, Barigi R. near Biriri, no 8616).—1964. With the 7th ARCHBOLD Expedition to Huon Peninsula in *Terr. of New Guinea*: Pindiu (Apr. 21–May 2, nos 8815–8852), Marba Creek (May 2–23, nos 8853–9033), Mt Rawlinson (June 3–July 4, nos 9034–9359), Mannasat (Cromwell Mts, July 20–Aug. 23, nos 9361–9677; 9678–9685 collected en route), Monarauwe (Salawaket Range, 9500 ft, nos 9686–9785, Aug. 30–Sept. 7), Tempapan (Salawaket Range, Sept. 7–Oct. 7, 11000 ft, nos 9786–10,013), en route to Kabwum (Oct. 7, nos 10,014–10,017).—1965. No collection in New Guinea.—1966. Sepik Distr. with CRAVEN; Hunstein Range and Mt Hunstein.—1969. Mainly coll. *Dilleniaceae* and *Saurauia* in: *Singapore* (Jan. 16–19); Ceylon, India, Thailand; *Penang* and *Kepong* (May 23–27), *Singapore* (27–31); *W. Java*: Bogor and Tjibodas (31–June 5).—1973 (mainly *Saurauia*, some *Dilleniaceae*). *Malaya* (May 22–June 4): incl. Cameron Highlands (May 25–27), Fraser's Hill (29–30), Ulu Gombak (31), Johore (June 3–4); *Singapore* (4–8). *Java* (8–22), incl. Langkong (11), Jasinga (13), Cibodas (= Tjibodas) (14–18); Ciapus (= Tjiapoes) Gorge (20), Telaga Warna (21).

COLLECTIONS.<sup>2</sup> About 12400 nos. Also dupl. in *Herb. Edinb.*

LITERATURE. (1) Cf. *Blumea* Suppl. 4, 1958, p. 220–238, 6 fotogr.

(2) *Mosses* by E. B. BARTRAM in *Brittonia* 11, 1959, p. 86–98; *Rev. Bryol. Lichen.* n.s. 30, 1961, p. 185–207.

B. L. VAN DER LINDEN: 'Evodiella, a new genus of Papuan Rutaceae' (*Nova Guinea* n.s. 10, 1959, p. 143–148, 1 fig.).

#### \*Hooley, Bruce Arthur

(1931, Daylesford, Vict., Australia; x) graduated with B. Chem E from the University of Melbourne in 1954 and joined the Summer Institute of Linguistics in 1958. He carried out linguistics research in the languages of New Guinea, especially the Buang language of Morobe District. In 1962 M.A. in linguistics from the University of Pennsylvania, and in 1968 engaged in completing work for a doctorate at the same university. He served as Chairman of the Linguistic Committee of the New Guinea Branch of the SIL and as principal of the Institute's Summer School at Brisbane; in 1968 Associate Director of the New Guinea Branch of SIL.

Author of linguistic papers.

COLLECTING LOCALITIES. In connection with the Buang language in Morobe District, *Terr. of New Guinea*.

COLLECTIONS. About 160 specimens in *Herb. Lac.*

#### \*Hope, Capt.

see Cycl. Fl. Mal. I, 1, 1950; identical?

COLLECTIONS. Plants from *Malay Peninsula* in *Herb. Edinb.* (from Glasgow Herb., pres. 1888).

## \*Hope, G. (S.)

of the Dept of Biogeography and Geomorphology, Australian National University, Canberra. He collected on Mt Wilhelm (1969–70), *E. New Guinea*; *Herb. Univ. Canberra*, ANU numbers 10620–10815.

A thesis on a vegetation history of Mt Wilhelm was due to be submitted, to Prof. D. WALKER (see there), June 1972.



HORSFIELD

In 1971 he accompanied an Australian expedition to Mt Carstensz in *W. New Guinea* for botanical and palynological work.

## \*Hornabrook, Richard William

(1925, Wellington, New Zealand; x), neurologist (M.D. New Zealand 1956), Director of the Institute of Human Biology, Port Moresby, Papua. Clinical Investigator, Kuru Research, Eastern Highlands New Guinea, 1963–65.

Author of medical and entomological papers of Kuru *etc.* in various journals.

COLLECTING LOCALITIES. 1963–65. *New Guinea*: Eastern Highlands, especially in Okapa subdistrict.

COLLECTION. In *Herb. Lae*.

## Horsfield, Thomas

COLLECTIONS. Add: In the India Office is a volume of 337 folios which appears (according to Dr JOHN BASTIN) to be BENNETT's (?) rearrangement of HORSFIELD's papers, giving Javanese and (or) Latin names of plants, ... Catalogues of plants *etc.* The official description in the I.O. includes: *localities where found*. The lists are mainly in two handwritings, one that of HORS-

FIELD, the other that of a copyist (B. *i.l.* July 1970). An 'Algemeene naamlijst der Planten van Java' from about 1810 is in the Rijksarchief in The Hague (Arch. Binnenl. Zaken, afd. Onderwijs, exh. 8 maart 1837 nr. 114).

His collection of drawings in the India Office Library includes some of mosses from Java (*nos* 1638–1642)<sup>11</sup>.

LITERATURE. (6) The cited English paper was not published in 1817, and never before 1848 in J. Ind. Arch. and East. Asia. Dr J. BASTIN has drawn my attention to this error which was probably based on an advertisement in some copies of Raffles' History of Java.

(9) Add: On the drawings see CL. NISSEN, 'Die botanische Buchillustration' 1951, vol. 2, p. 86.

(11) Cf. M. ARCHER: 'Natural History Drawings in the India Office Library' (London 1962) p. 47, 81.

BIOGRAPHICAL DATA. Add: Portr. in *Str. Times Annual* for 1971, p. 60; J. B. STANLEY: 'Horsfield in the Indies' (*ibid.* for 1972, p. 85–88, portr., ill.).

## Hose, Charles

Rightly: was born at Willian (not 'Witham') in Hertfordshire as a son of Rev. T. C. HOSE (a brother of Bishop HOSE), and died at Croydon, London (C. F. COWAN in *litt.* Feb. 12, 1968).

## \*Hose, Edward Shaw

(1871, Malacca; 1946 Normandy, Surrey, England), son of Bishop HOSE, cousin of CHARLES HOSE. In 1891 he entered the Malayan Civil Service, 1924–25 Colonial Secretary, Straits Settlements, Acting Governor of Singapore (1925); retired 1925.

COLLECTING LOCALITIES.<sup>1</sup> 1917. *Malay Peninsula*: Perak, G. Hijau, and Telok Anson, when stationed there; *Sembilan Is* (1918).

COLLECTIONS. *Herb. Kew* and *Sing*.

LITERATURE. (1) Cf. BURKILL in *Gard. Bull. Str. Settl.* 4, 1927, *nos* 4–5.

BIOGRAPHICAL DATA. C. F. COWAN in *litt.* Feb. 12, 1968.

## \*Hose, Ernest

(1872, Roydon, Norfolk, England; x), younger brother of CHARLES HOSE, to Sarawak as collector 1893–96, mainly in Baram District and Natunas in 1894. In 1896 he joined H. H. EVERETT, planting Cutch at Santubong; in 1901 joined the Borneo Co. and persuaded them to let him plant *Hevea* rubber. Started the first rubber plantations in Sarawak at Dahan Estate (1902), and at Sungei Tengah Estate (1907–19). Retired 1919.

*Dolichos hosei* CRAIB was named after him and not after Rev. G. F. HOSE.

COLLECTING LOCALITIES. 1894. *Natuna Islands* (July–Oct.): *Bunguran*, *P. Laut*, and some small islands.

COLLECTIONS. Mainly zoological, in B.M. (Nat. Hist.), and to Lord ROTHSCHILD. Plants from *Natuna Is* in *Herb. Kew*.

BIOGRAPHICAL DATA. C. F. COWAN in *litt.* Feb. 12, 1968.

## Hose, Ernest S.

The entry in the *Cycl. Fl. Mal. I*, 1, 1950 is a

mixture and must be replaced by ERNEST HOSE and EDWARD SHAW HOSE (see there).

**Hose, Rev. George Frederick**

**COLLECTIONS.** Add: In 1940 his daughter GERTRUD had a 'large' collection of (living?) ferns from Borneo and Malaya, made by her father, which she presented to the Botanic Gardens at Edinburgh (C. F. COWAN *in litt.* Feb. 12, 1968).

**Hose, Gertrud**

Add: (1883, Sarawak; x), from 1883–88 and 1903–08 in Sarawak with her father Bishop HOSE. from 1923–25 in Malaya with her brother EDW. S. HOSE (C. F. COWAN *in litt.* Feb. 12, 1968).

**Hosseus, Carl Curt**

(d. 1950, Cordoba, Argentine).

**BIOGRAPHICAL DATA.** Add: Rev. Sudamer. bot. vol. 10, no 1, p. 32.

**\*Hotta, Mitsuru**

(1937, Osaka, Japan; x) graduated in 1960 from the Agricultural Department University of Osaka Prefecture and was subsequently admitted to the graduate course of Kyoto University. Lecturer Biological Laboratory, Kobe Women's College, Aoyama, Suma-ku, Kobe-si.

In 1960 he was a member of the Tonga and Fiji Expedition of Kyoto University; in 1963–64 he collected in Borneo with Professor M. HIRANO (see there) of Osaka City University.

Author of papers on *Araceae*.

**COLLECTING LOCALITIES.** *Borneo*.<sup>1</sup> *Brunei*: Tutong (Oct. 6, 1963); *Sarawak*: Bintulu and Minah camp (Oct. 10–19, with HIRANO), Ulu Minah and Sinonok (Oct. 23–28), Bintulu (Oct. 31, Nov. 4), Ulu Kakus and Bt Keyan (Nov. 7–13, with HIRANO), Bt Kana (18–22, with HIRANO); *Brunei*: Seria and Bt Puan (Dec. 5–7), Merimbun (10–11), Bt Teraja (16–25), Brunei Town (Jan. 6 and 10, 1964), Brunei Tembrong (Jan. 19–Feb. 2); *Sarawak*: Minah camp (Feb. 23–29), G. Mulu (Mar. 15–22).—1968. *Sabah*, focussing special attention to the Kinabalu region in 1969.

**COLLECTIONS.** *Herb. Kyoto Univ.*; HIRANO & Hotta nos 1–1656; Hotta nos 12300–15847. Many cryptogams,<sup>2</sup> but phanerogams<sup>3</sup> too. Duplicates partly distributed to *Tokyo Nat. Sc. Mus.* (*Cyp.*, *Gram.*), *New York Bot. Gard.* (*Cyp.*), several families to *Herb. Tokyo Univ.* and many groups to *Herb. For. Dept Sarawak and Brunei*; *Sarawak dupl. to Herb. Edinb.*

**LITERATURE.** (1) M. Hotta: 'Itinerary of the Borneo (Notes on the Vegetation)' (*Acta Phytotax. Geobot.* 21, 1965, p. 153–160, maps 1–4).

(2) *Cf.* literature *sub* HIRANO.

(3) M. Hotta: 'Notes on Schismatoglottidinae of Borneo' I (Mem. Coll. Sc. Univ. Kyoto ser. B 32, 1965, p. 19–30, 5 fig.); 'Notes on Bornean Plants' I–II (*Act. Phytotax. Geobot.* 22, 1966, p. 1–10, 3 fig.; *ibid.* 1967, p. 153–162, 7 fig.); 'Notes on the wild banana of Borneo' (*J. Jap. Bot.* 42, 1967, p. 344–352, 1 fig., pl. 7).

**\*Hou, Ding**

(1921, Hsingkan, Kiangsi, China; x), botanist, B.S. in the National Chung-Cheng University, Kiangsi (1945); from 1945–47 Assistant in the

same university; Assistant, Nat. Taiwan University 1947–51; Research Assistant, subsequently Assistant Missouri Botanical Garden, St. Louis, 1951–55; Botanist Arnold Arboretum, Cambridge, Mass., 1955–56; Botanist Foundation Flora Malesiana 1956–60; since 1960 Scientific Officer Rijksherbarium Leyden. He made a study trip to the East in 1966, to familiarize himself with living *Anacardiaceae*.



DING HOU, Mt Kinabalu, 1966

**ITINERARY.**<sup>1</sup> 1966. *Singapore I.* (Apr. 6–20), visiting Johore (9), Kranji Nature Reserve (10), MacRitchie Reservoir Nature Reserve (14), Bt Timah Nat. Res. (16), Pasir Ris (17–18). *N. Borneo (Sabah)*: Sandakan (21–27), visiting the nearby Leila For. Res., Badu Sapi (mangrove forest), Berhala For. Res.; to Lahad Datu (28), visiting the Eastern Lowlands (29–May 17), Mt Salim (29–30), Lahad Datu (30–May 3), *P. Sakar* (2), Kennedy Bay and the Silabukan For. Res. (3–4), Kennedy Bay to Kunak (Mostyn), on the way visiting *P. Bohayan* (4), Madai For. Res. (5–7) and return to Mostyn (7); to *P. Tabauwan* (9), to Semporna (10), Quoin Hill and Membalua For. Res. and Mt Andrassy (11–15); Tawau (15–17), making excursions to Tawau Hills and Hot Spring For. Res.; back at Sandakan (19–24), visiting Leila For. Res. (21), virgin forest near Long's Farm (21–22), Sepilok For. Res. (23); Jesselton (25), Mt Kinabalu (26–June 9); National Park Headquarters vicinity (26–27), Tenompok (29), to the summit and back to Sospodon (30–June 1), to Layan-layan Mountain hut (c. 2600 m, 30), Panar Labah Mountain hut (c.

3300 m, 31), summit (c. 4200 m, June 1); Kundason (2), to Mesilau and staying in the bungalow of the Roy. Soc. Exp. (3-6), Sosopodon (7-9), Ranau (8), Jesselton (10-14), visiting Tuaran Agriculture Station and mangrove forests (13); *Sarawak*: Kuching (16-18), visiting Bau (18), Bintulu (19), Nyabau For. Res. (20-27), Bintulu (29), Segan For. Res., Nanga Sopulow (30-July 5), Bintulu (6), to Sibu (7), peat swamp forest (8), Bt Raya (9-11), back at Sibu (12), Bako National Park (14-17), Kuching (18-22), Arboretum Semengoh (20, 23-29); Kuching (30-Aug. 9), visiting Bau Limestone Hills (2), Samariang mangrove forest (5), Mt Medang (8); *Malaya*: Kuala Lumpur and to Kepong (10), to Kuala Kangsar, Perak, on the way to G. Bubu (12), G. Bubu (13-18); Kepong (19-31), visiting Bt Lagong, Ulu Gombah For. Res. (24), Telok For. Res., Klang (25), Batu Caves limestone hill (26), Kuala Selangor mangrove (28), Sg Meryak, Negri Sembilan (29), Batu Caves (31); to Kuantan, Pahang (Sept. 1), on the way visiting Kemasul For. Res. near Bentong, Menchli For. Res. (2), to Kuala Dungun, Trengganu, on the way visiting Balok For. Res. (3), Kuala Trengganu (4-5), visiting Bukit Bauk For. Res. and Jerangau State Land Forest; return to Kepong (6), to S. Patani, Kedah (8), G. Jerai (Kedah Peak, 9-11); *P. Penang* (12-15), Botanic Garden and Telok Bahang (13), Penang Hill For. Res. (14), Pandai Acheh For. Res., Telok Bahang (15) & Cameron Highlands, Pahang (16-17); Kepong (18), Kuala Lumpur (19-24) and excursion to mangrove forest Klang and Kuala Selangor; Thailand (26-Oct. 3); back in Holland (4).

**COLLECTIONS.** About 750 *nos*, partly with material in spirit;<sup>2</sup> some wood samples. In *Herb. Leyden*, numbering 115-869, including some cryptogams too.

**LITERATURE.** (1) DING HOU: 'Report of a Study-trip on Anacardiaceae to Malaysia and Singapore in 1966' (stencilled, 23 pp., 3 maps giving routes followed); *Fl. Mal. Bull.* no 21, 1966, p. 1394-1395.

(2) DING HOU: 'Sarawakodendron, a new genus of Celastraceae' (*Blumea* 15, 1967, p. 139-143).

#### Houttuyn, Martinus

Add: The presence of sheets which have belonged to the HOUTTUYN Herbarium has been proved beyond doubt. At least four sheets have been located in the Rijksherbarium Leyden, all collected by THUNBERG in Java. HOOGLAND<sup>3</sup> commented on the first. At least three others have been found as shown by VAN STEENIS & VELD-KAMP.<sup>4</sup>

**LITERATURE.** Add: (3) R. D. HOOGLAND: 'The genus Tetracera (Dilleniaceae) in the Eastern Old World' (*Reinwardtia* 2, 1953, 185-224, pl. 1, especially p. 207 and pl. 1).

(4) C. G. G. J. VAN STEENIS & J. F. VELD-KAMP: 'Note on Houttuyn's Herbarium' (*Blumea* 21, 1973, p. 151-152, with facsimile handwriting).

#### Howison, James

Add to Suppl. Cycl. Fl. Mal. I, 5, 1958: Author of 'Some Account of the Elastic Gum Vine of Prince of Wales' Island, *etc.*' (*As. Res.* 5, 1797, p. 157-165). He certainly was the discoverer of the

caoutchouc vine, but ROXBURGH made his description after material collected by CH. CAMPBELL in Sumatra, which was forwarded by FLEMING.

#### \*Hughes, Cecil Graham

(1913, Sydney, N.S.W., Australia; x) graduated B.Sc. in Agriculture from Sydney University in 1934. Shortly after he joined the Bureau of Sugar Experiment Stations and has been working with that organization ever since. Associated with cane-breeding and diseases of sugar-cane.

He joined the 1951 *New Guinea Expedition* in search of cane varieties.

Itinerary, collections, *etc.* cf. sub J. H. BUZACOTT.

\*Hujah Kabun, see Forest Dept North Borneo.

\*Hulskamp, R. F., see Boswezen Nieuw Guinea.

#### HZ, see H. ZOLLINGER.

His personal set was marked with these initials.

Idenburg, Abraham Gerrit Adrianus  
(d. 1949).

#### \*Ijiri, Shôji

(1913, Otaru city, Hokkaido, Japan; x), graduated from the University of Tokyo (1936), specialist in Palaeontology and Odontology of Mammals; Dr. Sc. Tokyo (1949).

**COLLECTING LOCALITIES.** *West New Guinea* from March to June 1943, with the Satake (see there) party.

**COLLECTIONS.** About 700 sheets of flowering plants; in *Herb. Nat. Sc. Mus. Tokyo*.

#### \*Iking, S.

Plants from Java in *Herb. Arn. Arbor.* See Index Herb. Pt II (Regn. Veg. 86) 1972.

#### \*Ilias bin Paie

collected in *Sarawak* from 1962 onwards.

**COLLECTIONS.** *Herb. Sarawak*; dupl. in *Herb. Edinb.*

#### Ireland

Add: Joseph C. (1893-x). See Index Herb. Pt II (Regn. Veg. 86) 1972.

#### \*Irmscher, J.

is mentioned as the collector of plants in *Borneo*; specimens in *New York* and *Paris* (rec. 1935). This record in Index Herb. Pt II (Regn. Veg. 86) 1972, seems doubtful to me.

#### Irsan

(d. Oct. 29, 1963, Bogor, Indonesia).

#### Iterson

Add: Frans Karel van (1884-x).

#### Iterson, G. van

(d. 1972, Wassenaar, Z. H., Netherlands).

#### \*Ives, David Wilson

(1939, Waimate, New Zealand; x) has been educated at the University of Canterbury, Christchurch, New Zealand, B.Sc. (NZ), M. Agric. Sci. 1st Hons (Cantaur.). From 1962-67 employed as

soil surveyor under U.N. Special Fund in Sabah, and by New Zealand Colombo Plan, in Pahang, both Malaysia. He worked in Indonesia on N.Z. Colombo Plan aid to Indonesia Beef Industry feasibility study on behalf of International Bank for Reconstruction and Development as part of team from consultant group, Asian New Zealand Development Consultants (A.N.Z.D.E.C.).

**COLLECTING LOCALITIES.** *Indonesia.* *SW. Celebes* (Sulawesi Selatan): Pare Pare, Enrekang-Rappang and Wadjo, together with O. ROBERTS.—1971. *Lesser Sunda Is.* (June–July): *Sumba*, at Kabaroe Karendi, and near Kodi; *Sumbawa*, at Plampang.—1973 (Feb.–Mar.). *SE. Borneo* (Kalimantan Selatan): near Tandjung, NE of Pleihari and along Sg. Tabanio; around Djilatan, Sebuhr, Djurong area SE from Pleihari. *Centr. Sumatra*: area E of Blang Bintang airport and N of Indrapuri; Padang Lawas area to E of Gunung tua and SW of Langga Pajung.

**COLLECTIONS.** *Herb. Christch.*, specimens determ. by B. E. V. PARHAM and E. EDGAR.

**Iwanggin, Gerrit Th.**  
collected in the BW series (see there).

#### \*Iwatsuki, Kunio

(b. 1934; x), bryologist, member of the *Kyoto University Biological Expedition* to Thailand (Aug. 7–Oct. 10) and *Malaysia*, 1967. Other members were T. SHIMIZU, N. KITAGAWA, N. FUKUOKA, M. HUTOH, J. ASHIDA, M. TAGAWA, M. HIRANO, S. UENO. In Aug.–Sept. 1971 he accompanied an expedition to *W. Sumatra*.

**ITINERARY.**<sup>1</sup> 1967. *Singapore* and Bt Timah (Aug. 2); *Malaya*: Templer Park and Batu Cave (Aug. 5–6); *Penang* (Oct. 13–16); Cameron Highlands (18–21); Templer Park (25); Fraser's Hill (26), G. Gombo(c)k (28–29); Batu Cave (30), Gua Musang (Oct. 31–Nov. 2), G. Pulai and G. Panti in Johore (2–4); Bt Timah (6).

**COLLECTIONS.** 1st set in *Herb. Kyoto*, 2nd set in *For. Herb. Bangkok*. The Malayan specimens numbered with the prefix 'M' (Thailand with 'T').

**LITERATURE.** (1) K. IWATSUKI: 'Biological expedition to Thailand and Malaysia' (Acta Phytotax. Geobot. 23, 1968, p. 127–128, 1 map).

**BIOGRAPHICAL DATA.** Portr. in HATUSIMA, *Flora Ryukyus* 1971, p. 71.

#### Jaag, Otto

**ADD: BIOGRAPHICAL DATA.** In *Festschrift O. Jaag* (Schweiz. Z. Hydrobiol. 22, 1960, p. 9–17, portr.); *Wasser Abwasser* 111, 1970, p. 175–246, portr. (70 years old).

#### Jack, William

**LITERATURE.** (7) **ADD:** Dr J. BASTIN kindly drew my attention to DON's Account of Lambert's Herbarium, Appendix p. 31, where it reads: "The late Dr. William Jack, who was attached to the suite of Sir Stamford Raffles, Governor of Sumatra, has sent all the specimens described in the first volume of the 'Malayan Miscellanies' among which are three splendid species, of that most remarkable genus of plants, *Nepenthes*."

**BIOGRAPHICAL DATA.** **ADD:** J. Bomb. Nat. Hist. Soc. 56, 1960, p. 449–456.

#### Jacobs, Marius

In 1959 appointed, on the staff of Flora Malesiana Foundation, at Leyden; subsequently on the staff of the Rijksherbarium; Ph.D. Leyden (1965).

In 1963 he joined a bio-archaeological expedition in West Persia for some months.

*Cyclosorus jacobii* HOLTT. has been named after him.



GERRIT TH. IWANGGIN,  
noteworthy forest exploration officer, Hollandia/  
Manokwari, 1957–1961.

**COLLECTING LOCALITIES.** 1957. **ADD:** *W. Java*: G. Gedeh, above Tjibodas (Nov. 6); occasionally in *Hort. Bog.*—1958. *Hort. Bog.*: Tjibodas (June 15), G. Pangrango (16), G. Gedeh (17), Tjibodas (18). Leaving Bogor (July 20), arriving in *Sarawak, NW. Borneo*, at Kuching (28); with J. A. R. ANDERSON to Mt Penrissen (Aug. 1–9; coll. nos 5000–5138); to Sungei Serin limestone hills (10–12, nos 5139–5183); to Belaga on the Rajang River, Segaham Range (Aug. 20–Sept. 7, nos 5184–5465); delta of the Rajang River near Sibu (Sept. 11, nos 5466–5468); Seburuan Bau limestone hill near Kuching (14, nos 5469–5484); Bako National Park (16–17, nos 5485–5521); Mt Matang (19–21, nos 5522–5568); *Brunei* (arriving Sept. 25): with P. SHAW ASHTON to E. Brunei, Kuala Belalang (Sept. 29–Oct. 5), riverbeds (nos 5569–75651); W. Brunei, Andulau Forest Reserve (8, nos 5652–5662), near Telamba bridge on the road Brunei-Kuala Belait (9, nos 5663–5695), Badas Forest Reserve (10, nos 5696–5698), Brunei town (10, no 5699); to *N. Borneo* (Oct. 12); Ranau (13, no 5700) and with D. I. NICHOLSON to Mt Kinabalu (14–18, nos 5701–5792);<sup>2</sup> leaving Ranau (20), and *Singapore* (28) for Europe.—1968. *Philippines, Luzon*. Leaving for Baguio with D. R. MENDOZA and R. ESPIRITU (Jan. 17), camp

at Babadak, SW. slope Mt Pulog<sup>4</sup> (c. 2400 m), and in the top area (from Jan. 28) at c. 2700 m; climbing summit on the 31st; return to Babadak (Feb. 7–10); Mt Tabayoc, camp at 2350 m (Feb. 14), visiting the summit (16), 2850 m; return to Manila (22); Mar. 7 to lowland forest in the Sierra Madre mountain chain,<sup>5</sup> E. Luzon, collecting from sea-level up to about 1200 m NE and NW of Dingalan; camp on the road to Baler (Mar. 21–25). *S. Sumatra*, Prov. of Lampung:<sup>6</sup> above Giesting on the E. Slope of G. Tanggamus at 1100 m alt. (base camp), collecting from Apr. 25–May 4 (nos 8021–8274), reaching the summit on Apr. 25; primary forest NW of Kota Agung at 350–450 m alt. (May 9–19; nos 8275–8515).

COLLECTIONS. *Borneo* collection in *Leyden*, *Kew*; resp. in *Kuching*, *Brunei*, or *Sandakan* (the territory where the collection was made); *Geneva*, *Wash.*, *Canberra*, *Berlin*, *Stockh.*, *Manila*, *Ithaca*. In *Herb. Sing.*: *Borneo* dupl. *Annonaceae* and *Myristicaceae*.

Collections made in Hort. Bog., and on G. Gedeh (Nov. 6, 1957; June 1958) are without numbers, mostly for Bailey Hort. *Ithaca*, N.Y.; dupl. in *Dehra Dun*.

Mosses from the *Philippines* (1968), about 600 collections, will be numbered in a B series after study by A. Touw.

LITERATURE. (1) Replace by: M. JACOBS: 'Contribution to the Botany of Mt Kerintji and adjacent area in West Central Sumatra' I (Ann. Bog. 3, 1958, p. 45–79, 24 photogr., 1 map).

(2) Replace by: M. JACOBS: 'Botanical Reconnaissance of Nusa Barung and Blambangan, South East Java' (Blumea Suppl. 4, 1958, p. 68–86, map, 4 photogr.).

(3) M. JACOBS: 'Plant Life on Mount Kinabalu' (Mal. Nat. J. 15, 1961, p. 134–139, map, photogr.).

(4) Cf. Fl. Mal. Bull. no 23, 1969, p. 1686–1687.

M. JACOBS: 'The Plant World on Luzon's highest mountains' (Publ. Rijksherbarium 1972, 32 pp., 16 photogr., 1 drawing, 1 map).

(5) M. JACOBS & D. R. MENDOZA: 'Opportunities and suggestions for botanical exploration work in the Sierra Madre Mountains, Luzon' (Rijksherbarium Leiden, 1969, folio, stencilled, 14 pp., 1 map).

(6) Cf. Fl. Mal. Bull. no 23, 1969, p. 1685; M. JACOBS: 'Botanical Exploration in the Lampung Province, Sumatra' (Reinwardtia 8, 1972, p. 345–349).

BIOGRAPHICAL DATA. Curr. vitae in Thesis Leyden 1965.

#### \*Jacovlev, Professor

from Soviet Russia, accompanied A. DILMY (see there) to *Bali* in 1963, to study pioneer plants on Mt Agung.

#### Jacquinot, Honoré

Add: Was admitted as a doctor in 1848, and practised at Nevers. Brother of the commander of La Zélée (see J. B. HOMBRON).

BIOGRAPHICAL DATA. In Bibl. Austr. Entom. 1775–1930 (R. Zool. Soc. N.S.W. 1932, p. 62).

\*James, P. W., see sub A. C. JERMY.

Jannet, see JAUNET.

\*Jaswir, see Forest Dept North Borneo.

#### \*Jaunet, Victor

whose name was erroneously written 'JANNET' (see Suppl. Cycl. Fl. Mal. I, 5, 1958) in ROXBURGH Hort. Beng., was Director of the Governor's Garden at Ile-de-France (= Mauritius) and Bourbon.<sup>1</sup> As already assumed he distributed material from the garden to Calcutta, etc., from about 1809–1811.

LITERATURE. (1) Cf. Ann. Mus. Hist. Nat. Paris 16, 1810, p. 484, 485.

\*Jawanting, A., see Forest Dept North Borneo.

#### Jensen, Hjalmar

BIOGRAPHICAL DATA. Add: Dansk Bot. Arch. 21, 1963, p. 64–65, 167 (bibliogr.).

#### Jensma, J.

Add: (d. 1965, 76 years old), former teacher at a secondary school at Leeuwarden (Fr.), Netherlands.

BIOGRAPHICAL DATA. Vakbl. Biol. 45, 1965, p. 81.

#### \*Jensma, Jan Rienik

(1927, Vrouwenparochie, Fr., Netherlands; x) was educated in horticulture at Wageningen College from 1947–53, taking his Dr's degree in 1957. In the first half of 1950 he served in the Dutch army at Bogor.

COLLECTIONS. At the request of Prof. VENEMA he brought back one representative of each family, in the Bogor Botanic Gardens, assisted by a mantri, collected Nov. 1949–July 1950; in total 130 nos. *Herb. Wageningen*.

#### \*Jermy, A. Clive

(1932, Strumpshaw, Norfolk, England; x) graduated B.Sc. (Hons) in Botany at University College London in 1954; post-graduate research for Ph.D. in taxonomy at Leicester University; 1957–58 Assistant-teacher at Gravesend, Kent, Secondary School, instead of military training for conscription. Since Oct. 1958 in charge of the Fern section of the British Museum (Natural History).

Leader of the British Museum-Newcastle upon Tyne Expedition, 1964–65, to East New Guinea.<sup>1</sup> Members: T. G. WALKER, A. EDDY, P. W. JAMES; C. D. SAYERS and R. PULLEN were both seconded to the expedition, at least in 1964 to the Finisterre patrol.

ITINERARY. British Museum-Newcastle upon Tyne Expedition, 1964–65.<sup>1</sup> 1964. *E. New Guinea*: for the Finisterre Mts see sub C. D. SAYERS; lowland rain-forest around Lae (Dec. 12–Jan. 3) by the four U.K. members only.—1965. Vagau and Herzog Mts, 3000–6000 ft (Jan.), in company with SAYERS. Eastern Highlands: Kainantu; Feb. 4 EDDY, WALKER, and JERMY to Aiyura (coll. 5000–7000 ft), Mt Elandora of the Kratke Mts (Feb. 11), 4 days in Okapa area. JERMY and EDDY to the Upper slopes of Mt Wilhelm, Bismarck Mts (Feb. 16–Mar. 5), from Lake Pindeunde. In the meantime WALKER (see there) to *New Britain*.—1969 (end). *Central Celebes* and *S. New Ireland*.



**COLLECTIONS.** The expedition concentrated mostly on ferns and other cryptogams; in total over 1000 phanerogams (pentaplicates) were collected. In *Brit. Mus.*, Kew; representative sets to *Lae* and *Canberra*.

**LITERATURE.** (1) A. C. JERMY & C. D. SAYERS: 'An Expedition to the Finisterre Mountains of Eastern New Guinea' (*J. R. Hort. Soc.* 92, 1967, p. 117–128, fig. 54–55, 57–63, 1 map).

A. C. JERMY: 'British Museum (Nat. Hist.)—University of Newcastle upon Tyne Expedition' (32 pp., map, 2 pl., 9 photogr.).

**Jeswiet, Jacob**

(d. 1960, Bennekom, Gld., Netherlands).

**Jochems, Sarah Cornelis Johannes**

(d. 1966).

\***Joenoos**, see Forest Research Institute, Bogor.

\***Johns, R. J.**

M.Sc.; employed in the Division of Botany at *Lae, Terr. of New Guinea*, at present teacher at Bulolo Forestry College.

He accompanied Dr B. O. VAN ZANTEN (see there) on a trip in *E. New Guinea* in Oct.–Nov. 1969.

Joint author of a Check list of Mount Wilhelm Flora.<sup>1</sup>

He probably collected in both the NGF and LAE series.

**LITERATURE.** (1) R. J. JOHNS & P. F. STEVENS: 'Mount Wilhelm Flora: A Check List of Species' (*Bot. Bull.* no 6, 1971, 60 + 4 pp., 7 fig., 1 map).

\***Johnson (née Garrard), Anne**

(1928, London, England; x) graduated B.Sc. (Special) at London (1949); Ph.D. 1951. Demonstrator in Biology, University of Malaya, Singapore, 1951–54; Librarian Singapore Botanic Gardens, 1954; 1954–64 Lecturer in Cryptogamic Botany, University of Malaya; 1964–66 Senior Lecturer, University of Singapore; 1966–68 Professor of Botany, University of Malaya, Kuala Lumpur, now in the Biology Department, Nanyang University, Singapore.<sup>1</sup>

**COLLECTING LOCALITIES.** 1951. *Malaysia: Malay Peninsula, Singapore, Sarawak*.—In 1967 at Jambu Bongkok, Trengganu (Feb.–Mar.); G. Benom, Pahang (Apr.);<sup>1</sup> *Langkawi Is* (May).

**COLLECTIONS.** Mainly bryophytes and pteridophytes, nos 1–4000 in *Herb. Sing. Univ.*; nos 4050–4378 in *Herb. Univ. Malaysia Kuala Lumpur*.

**LITERATURE.** (1) Author of 'An account of the Malaysian Leucobryaceae ('lumut puteh')' (*Gard. Bull. Sing.* 20, 1964, p. 315–360); 'Malayan Botany' (East. Univ. Press 1966); 'Bryophytes and Filmy Ferns from Gunung Benom' (*Bull. Br. Mus. (Nat. Hist.) Zool.* 23, no 2, 1972, p. 17–20); *etc.*

**BIOGRAPHICAL DATA.** Who's who in Malaysia and Singapore 1967.

\***Johnson, Lawrence Alexander**

(1925, Cheltenham, near Sydney, Australia; x) graduated from the University of Sydney (1948); botanist at the National Herbarium of New South Wales since 1948 (from 1962–63 Liaison Officer at

Kew); 1972– Director of the Sydney Botanic Gardens and the N.S.W. National Herbarium.

He attended the opening of the *Lae Herbarium* in *New Guinea*.

**COLLECTING LOCALITIES.** Between 1962–63. Some cultivated *Casuarina spp.* in *Singapore*.—1965. *East New Guinea*: Port Moresby area (Apr. 6), Sogeri area (7); Wau, Bulolo, Mt Kaindi (8–9); Bulolo-Lae (10), Lae (11–12), Aiyura-Kainantu area in Eastern Highlands (13–14).



JERMY

**COLLECTIONS.** In *Nat. Herb. N.S.W.*: c. 25 nos from *New Guinea*. He collected some herbarium and cytological material of selected groups of angiosperms<sup>1</sup>.

**LITERATURE.** (1) *Cf. Pac. Sc. Ass. Inf. Bull.* 19, no 4, 1967, p. 9.

Some results incorporated in B. G. BRIGGS & L. A. S. JOHNSON: 'The Status and relationships of the Australasian species of *Typha*' (*Contr. N.S.W. Nat. Herb.* 4).

\***Johnston, A. M.**

collected *Buddleja sp.* no 75 in the Cameron Highlands, Pahang (Jan. 27, 1952); in *Herb. Sing.* Possibly = ANNE JOHNSON (see there).

\***Jones, William**

Plants from the *Philippines* (coll. 1908–09) in *Herb. Chicago Field Mus.* See Index *Herb. Pt II* (Regn. Veg. 86) 1972.

**Jong, Jan Kornelis de**

(d. 1972, Hilversum, Netherlands).



BIOGRAPHICAL DATA. Vakbl. Biol. 52, 1972, p. 342.

**\*Joubert**

collected 18 varieties of sugar-cane on *Tabar I.* and *New Ireland* in 1921. He was sponsored by the Colonial Sugar Refining Co of Australia.<sup>1</sup> Whether any herbarium specimens were made is unknown to me.

LITERATURE. (1) Cf. Hawaiian Plant. Rec. 55, 1958, p. 213; Cane Growers' Quart. Bull. Brisbane 15, 1951, p. 40.

**\*Juliano, Bienvenido O.**

collected a *Scleria* on the College Campus, Laguna, Luzon (Sept. 1952).

**\*Juliano, José Buencamino**

(1900-x). Plants from the *Philippines* in *Herb. Stanf.* and *Rocky Mts Herb. Un. Wyoming*. See Index Herb. Pt II (Regn. Veg. 86) 1972.

**\*Junus Dali**, see Forest Research Institute, Bogor.

**\*Kadim bin Abdul**

erroneously mentioned as KADIR BIN ABDUL (see Suppl. Cycl. Fl. Mal. I, 5, 1958).

**\*Kadim bin Tassim**

collected with J. SINCLAIR in *N. Borneo* (June-July 1957); with J. CARRICK & I. ENOCH in *Sarawak*: Bako National Park (Apr. 18-May 11, 1959). In *Malaya* with MAHMUD BIN AWANG in Pahang (Mar.-Apr. 1959), with MOHD NUR in Johore (June-July 1959), with Mrs ALLEN (Aug. 1959), with R. K. DENTAN in Perak (Feb. and Apr. 1962). He must have collected in several other instances.

COLLECTIONS. *Herb. Sing.*; dupl. elsewhere, a.o. *Herb. Edinb.*

Kadir bin Abdul, rightly: KADIM BIN ABDUL.

**Kaempfer, Engelbert**

BIOGRAPHICAL DATA. Add: CL. NISSEN: 'Die botanische Buchillustration' 1951, p. 89-91; K. MEIER-LEMGO: 'Die Briefe Engelbert Kaempfers (1651-1716)' (Abh. math.-naturw. Kl. Akad. Wiss. Mainz no 6, 1965, p. 265-314).

**\*Kairo, A.**

was attached to the Forestry School, Bulolo, East New Guinea, in the 1960s.

COLLECTIONS. From *E. New Guinea*, in *Herb. Lae*; dupl. elsewhere, also in *Herb. Edinb.*

**Kalkman, Cornelis**

Add: He left New Guinea in Sept. 1959, and was appointed staff member of the Rijksherbarium, Leyden; Ph.D. Leyden (1965); since September 1972 Director, and Professor at Leyden University. *Dimorphophanthera kalkmanii* SLEUM. was named after him.

ITINERARY & COLLECTING LOCALITIES.

Add: 1957. *W. New Guinea*: Kelobo I., Strait Sele and Rufe, Sorong (Nov.); *S. New Guinea*: Merauke, Lampu Satu (Dec.).—1958. *W. New Guinea*: surroundings of Manokwari: near Teminabuan (Beriat), Wersar (Apr. 18-May 5);

*P. Adi* (May 31-June 1); Fak-Fak (June 21-24); Kebar Valley.—1959. *S. New Guinea*: Muju region (Jibi, Opka, Biakatem, Awemko, Umkubun Iwurmot) (Mar. 8-31; numbered in the BW series). *Centr. New Guinea*: Star Mountains Expedition (leader: L. D. BRONGERSMA, see there) (Apr. 16-Aug. 30)<sup>1</sup>; Sibil Valley, Orion Mts (Ok Tenma, Tenmasigin, Along), Junction of Bon and Minam R., Mt Antares.—1966. *Centr. New Guinea*: Expedition to Doma Peaks and Hindenburg Range<sup>2</sup>, with VINK, GILLISON, and FRODIN: South. Highlands Distr., Tari Subdistr. (Tigibi, Ibiwara, Mt Kerewa, Mt Ne, Mt Ambua, Lei R.) (June 5-Aug. 30); W. Sepik Distr., Telefomin Subdistr., Hindenburg Range (Mt Amdutakin, and between Feramin and Telefomin) (Sept. 11-18).

COLLECTIONS. Add: BW nos 6201-6500, 8501-8550; Star Mts Exp., own numbers 4001-4560 (partly with TISSING, NICOLAS, VAN ZANTEN, DE WILDE), Exp. Doma Peaks etc. private nos 4601-5324. In total about 2060 nos. Private numbers: 1st set in *Leyden*, 2nd at *Lae*, 3rd *Canberra*, etc.

LITERATURE. (1) Cf. reports in *Tijd. K. N. A. G.* 76, 1959, p. 98-103 w. map, 211-213, 323-326; C. KALKMAN: 'Description of vegetation types in the Star Mts Region, West New Guinea' (Nova Guinea, Bot. no 15, 1963, p. 247-261).

(2) C. KALKMAN & W. VINK: 'Botanical Exploration of the Doma Peaks and adjacent mountains in the Southern Highlands District, Terr. of Papua, Austr. New Guinea' (Report for 1966, Neth. Found. Advanc. Trop. Res. WOTRO, p. 50-52, 2 fotogr.); 'Botanical Exploration in the Doma Peaks, New Guinea' (Blumea 18, 1970, p. 87-135, fig. 1 (map)-5, fotogr. 1-25).

BIOGRAPHICAL DATA. Curr. Vitae in Thesis Leyden 1965.

**Kalshoven, Louis George Edmund**  
(d. 1970, Netherlands).

BIOGRAPHICAL DATA. Vakbl. Biol. 50, 1970, p. 144.

**\*Kamis**, see Forest Dept North Borneo.

**\*Kandilis**, see Forest Dept North Borneo.

**Kanehira, Ryôzo**

LITERATURE. (2) Add: For sketch map of the route in the Arfak Mts and itinerary see W. VINK in *Nova Guinea*, Bot. 22, 1965, p. 488.

(4) Add: P. VAN ROYEN: 'Publication Dates of and Index to Taxa in Reports by R. Kanehira on Plants collected during the Kanehira-Hatusima 1940 Collection in New Guinea' (Bot. Mag. Tokyo 86, 1973, p. 143-154).

**\*Kanis, Andries**

(1934, Alphen a/d Rijn, Netherlands; x), botanist, educated at Leyden University, where he took his Ph.D. in 1968<sup>1</sup>. In August 1965 he entered the service of the Dutch Ministry of Foreign Affairs and was stationed as a botanist in the Forest Department of Sabah (N. Borneo), Malaysia; from Jan. 1966 acting as Head of the Sandakan Herbarium; in Oct. 1966 he returned to Leyden. April 1969 he left for Canberra, Australia, for the time being on a contract in the employ of C.S.I.R.O.

En route he visited Ceylon in connection with the Colombo Plan.

**COLLECTING LOCALITIES.** *Malaysia.* 1965. *Sabah* (N. Borneo): with W. MEIJER to Mt Kinabalu (Sept. 2–28).—1966. *Sabah*: Tour along the W. coast, visiting regions of Kota Belud, Kudat, Jesselton, Tenom, Keningau, and Ranau (Feb. 3–Mar. 10); to the E. coast with D. HOU in the regions of Lahad Datu Kunak, Semporna, Tawau (Apr. 28–May 18); Mt Kinabalu tour with D. HOU (May 25–June 11); *Sarawak*: field work in Ulu Bakong, Baram (one month), continued in the Lambir Hills, Miri (2 months), Nyabau and Segan Forest Reserves, Bintulu (2 months); Mt Matang, Semengoh Arboretum, and Bako National Park (Aug.). When returning to Leyden in October he paid short visits to Brunei, Kuching (*Sarawak*), *Singapore* (Bt Timah), and Kepong in the *Malay Peninsula* (8 days making trips to Bt Lagong, Telok F. R., Batu Caves, Fraser's Hill), and Bangkok.—1969. *Papua*: Owen Stanley Range, also Mt Wadimana (E. summit Simpson massif).—1970. *Papua*: Astrolabe Range and near Efogi on the Kokoda Trail (4 weeks after ANZAAS Congress).

**COLLECTIONS.** *Herb Sandakan*: c. 250 nos, collected in the SAN series, often together with Sabahan collectors; dupl. mainly in *Kew* and *Leyden*. A small, private series, numbered B. 1–22, contains mosses from *Sabah* (in *Herb. Leyden*) and *Ochnaceae* from *Sarawak* (*Herb. Leyden* and *Kuching*). *Papua* plants will be in *Canberra*.

**LITERATURE.** (1) On 'A revision of the *Ochnaceae* of the Indo-Pacific area' (*Blumea* 16, 1968, p. 1–83).

**BIOGRAPHICAL DATA.** Curriculum vitae in his thesis (preprint of *Blumea*, see *Liter.* 1), *Leyden* 1968.

\***Kapis bin Sisiron**, see Forest Dept North Borneo.

\***Kardin, M. Kosim**

graduate biology student of the Bandung Technological Institute, assisted J. R. FLENLEY and R. J. MORLEY (see those) in their investigations in *Indonesia* in 1972.

\***Kassim, Rajab**

collected at Gua Batu, Selangor (Aug. 17, 1962).

**Kastalsky, G.**

(fl. 1826–29) was mentioned as a collector in *Luzon* (cf. *Cycl. Fl. Mal.* I, 1, 1950). Physician and Naturalist on the sloop 'Möller' (Capt. STANJUKOVITCH) which accompanied the 'Sen-jawin' (see K. H. MERTENS), 1826–29.

**COLLECTIONS.** *Herb. Leningrad* (cf. HULTÉN in *Bot. Not.* 1940, p. 300); some in *Kew*; *Herb. Oxford*: from Manila (*Luzon*) and the Pacific islands (with *Herb. Fielding*).

\***Katayama, Tadao C.**

(1932, Konosu, Saitama, Japan; x), agriculturist, educated at Kagoshima University (1952–56), and taking his Master's and Doctor's course at Kyoto University (1956–61); Dr. of Agriculture (1963); Researcher, National Institute of Genetics (1961–67); Assistant Professor of Agriculture at Kagoshima University from 1967. He was sent to the

Philippines and New Guinea in January 1961, and to Borneo and Java in March 1963 for collecting wild and cultivated rice, with grants from the Rockefeller Foundation.

**COLLECTING LOCALITIES.** 1961. *Philippines*. *Mindanao*: Zamboanga; *W. Negros*: Hinigaran; *Palawan*: Bangodo; *Sorsogon*: Juban; Legaspi; *Mindanao*: Muswan. *W. Irian*: Opeco, Baad and Wajaw in Koembe area; Merauke; *Territory of Papua*: Madang.—1963. *W. Java*: Bogor, Depok, Bidaratjina. *Kalimantan (Borneo)*: Bandjermasin, Belandean, Handilmanarap; *N. Borneo*: Bandau, Langlon, Malalap, Keningau, Panggi; *Brunei*: Lemunin, Labi; *Sarawak*: Limbang, Hiller and Ulu near Simanggang, Miri, Seriau, Lundu, Bunsit (Keningau).

**COLLECTIONS.** Numerous strains of 7 species were collected for his institute; possibly part of them were made into herbarium specimens.

**LITERATURE.** (1) T. C. KATAYAMA: 'Wild *Oryza* species of the Philippines, New Guinea, Borneo, and Java (Seiken Zihō, Rep. Kihara Inst. Biol. Res. Yokohama no 15, Dec. 1963, p. 35–46; list of collecting localities *l.c.* p. 36–39); 'Scientific Report of the Rice-Collection-Trip to the Philippines, New Guinea, Borneo and Java' (*Mem. Fac. Agr. Kagoshima Univ.* 6, 1968, p. 89–134; extensive diaries on p. 112–115, 130–133); 'Botanical Studies in the genus *Oryza*' I (*ibid.* 7, 1969, p. 89–117, diagr., fig. 1–163, incl. map).

\***Kate, ten**

collected some interesting mountain plants in *Central Timor* on March 13, 1891, viz *Drosera*, *Vaccinium timorense*, *Habenaria*, and *Diuris fryana* RIDL., on G. Lakân or Reedtz Thott Mt, c. 2000 m alt. ? Exclusively in *Herb. Leyden* (labels written by BOERLAGE).

\***Katik, Paul**

(1940, Kemeng, Terr. of New Guinea; x), field assistant in Division of Botany at Lae. He participated in numerous explorations in various parts of *New Guinea*, including in the N. district of *Papua* at Ioma (2 weeks, ?1966), and in *New Ireland* (with M. J. E. COODE).

**COLLECTIONS.** *Herb. Lae*; dupl. also in *Herb. Edinb.*

\***Kaul, Robert Bruce**

(1935, Faribault, Minnesota, U.S.A.; x). Ph.D. Univ. of Minnesota (1964); Associate Professor of Botany, Univ. of Nebraska in Lincoln, U.S.A.; his special interest is aquatic monocotyledons.

He collected in *Sabah* together with ABBE, BOGLES and MEIJER, as a field research assistant to Prof. ABBE, with an NSF grant. Besides the tropics, Europe, the Near East, and Japan was visited.

He published on the morphology, ontogeny, phylogeny, evolution, etc., specially in connection with aquatic plants.

**ITINERARY.** 1961. *India* (Sept. 21–Oct. 6); *Ceylon*: Colombo (Oct. 23); *Malaya*: *Singapore*, Cameron Highlands, *Penang*, Fraser's Hill, *Kuala Lumpur* (Oct. 31–Jan. 21, 1962).—1962. *Sabah*: Mt Kinabalu (Feb. 2–23); *Philippines*: *Luzon*: Baguio, Quezon Prov. (Mar. 3–17).

**COLLECTIONS.** *Fagaceae* for Prof. ABBE and material for his thesis. In *Herb. Minnesota*, nos 1706–2124, mainly aquatic monocotyledons; dupl. in *Herb. Lae* and *Herb. Edinb.*

**\*Keck, V.**

**COLLECTIONS.** *Herb. Göttingen*: from S. America (1878–79) and *Singapore* (1878). European plants in *Geneva*. See Index *Herb. Pt II* (Regn. Veg. 86) 1972.



DR. & MRS. HSUAN KENG

**Keir, Walter**

Add: He was in England in August 1700 (*cf.* letter to PETIVER in SLOANE MSS 4063, folio 41).

**Keith, Henry George**

Later for F.A.O. at Benghazi, Libya.

**\*Kellers, Henry Carsten**

(1874–x). *Philippine* plants (1929) in *U.S. Nat. Herb. Wash.* See Index *Herb. Pt II* (Regn. Veg. 86) 1972.

**\*Kellman, Martyn Carden**

(1941, Barbados, West Indies; x), B.Sc. McGill University (1962), M.Sc. University of Wisconsin (1963), Ph.D. Australian National University (1968); Assistant Professor of Geography in Simon Fraser University, Burnaby, British Columbia. He joined an Arctic expedition of McGill University to Axel Herberg Island (1961), visited the Philippines twice (see below),<sup>1</sup> and British Honduras in 1969.

**ITINERARY.** *Philippines* (Jan.–Mar. 1964, Nov. 1964–Nov. 1965),<sup>1</sup> collecting in Coronon Valley and Gumate Distr. (Barrio Tungkalan) on the E. slopes of Mt Apo, *Mindanao*.—*E. New Guinea* under D. WALKER.

**COLLECTIONS.** *Herb. Canberra*, numbered in the ANU series of the University, viz 1500–1729 (complete), 1730–1999 (partial), 3000–3442 (partial).

**LITERATURE.** (1) Author of: 'Some environmental components, of Shifting Cultivation in *Mindanao*' (*J. Trop. Geogr.* 28, 1969, p. 40–56); 'Secondary Plant Succession in Tropical Montane *Mindanao*' (*Canberra, Austr. Univ. Press*, 1970).

**\*Kelly, Raymond C.**

of the Department of Anthropology, University of Michigan, Ann Arbor, U.S.A. He collected some 30 plants in Mt Hagen area, *Territory of Papua and New Guinea*, probably in 1968.

**COLLECTIONS.** In *Herb. Leyden*, received via VAN ZANTEN, Groningen.

**\*Keng, Hsuan**

(1923, Kiangsu, China; x), B.Agr. Nat. Chung-Chen Univ. Kiangsu, China (1947); M.Sc. Nat. Taiwan Univ. Taiwan, China (1949); Ph.D. Univ. of Calif., Berkeley, U.S.A. (1959). Teaching Assistant Dept of Bot., Nat. Taiwan Univ., 1950–53; Lecturer in Botany, Dept of Bot., Nat. Taiwan Univ., 1953–57; Research Fellow, Morris Arboretum, Univ. of Pennsylvania, 1959–60; Lecturer in Botany, Univ. of Malaya, Singapore, and later Univ. of Singapore, 1960–66; Senior Lecturer in Botany, Univ. of Singapore, 1966 onwards.

Author of numerous taxonomical and morphological papers and some books. At present working on *Labiatae* and *Theaceae*.

**COLLECTING LOCALITIES.** On and around *Singapore*; with J. A. R. ANDERSON in *Sarawak* (NW. *Borneo*), Baram Distr. (July 1961); UNESCO Limestone Expedition (Ulu Kelantan, *Malaya*) (Aug. 1962); early 1968 exploration trip to the *Langkawi Is.*, with some students.

**COLLECTIONS.** In *Herb. Dept Bot. Univ. Sing.*; some dupl. in *Herb. Sing.*

**\*KEP nos**

a series of the Forest Research Institute at Kepong, *Malaya*. As it reached the six figures by 1965, a new series with the prefix FRI was begun in 1966; the first number is FRI 0001. The junior staff continued (at least still in 1967) with the KEP series.

**Kern, Johannes Hendrikus**

Hon. Dr at Nijmegen University (1970).

**BIOGRAPHICAL DATA.** *Gorteria* 4, 1968, p. 69–72; *Blumea* 17, 1969, p. 1–3; *Fl. Mal. Bull. no* 25, 1971, p. 1910 (Hon. Dr); *Jaarb. Versl. & Meded. Kon. Ned. Bot. Ver.* over 1970, 1971, p. 95–99.

**Kerr, Arthur Francis George**

**ITINERARY.** Add: 1932. From Mergui by steamer to Rangoon, arriving June 8; leaving (9) for *Penang* (arrival 12); proceeding to *Pulau Langkawi* (16), collecting there and leaving (21); back at *Penang* (22), sailing for Europe on the 23rd.

**BIOGRAPHICAL DATA.** Add: *Blumea* 11, 1963 p. 427–493, portr., itin., bibliogr.

**\*Kerr, Harlan**

collected a *Cyperaceae* in Cotabato Prov., *Mindanao*, Nov. 1956.

**Kerr, William**

Data at Kew make it clear that he visited *Java* in 1804, not in 1805.

**Keysser, Christian**

**COLLECTIONS.** Add: Duplicates bought by the *Herb. Brit. Mus.* (1923).

**Kiah bin Hadji Mohamed Salleh**

Add: In 1937 he collected with MOYSEY; from 1949–55 with J. SINCLAIR; in 1957 with CHEW WEE LEK. At the end of the latter year he retired after 37½ years of service.

COLLECTIONS. *Herb. Sing.*; dupl. *Herb. Edinb. etc.*

**\*Kieckx f., Jean**

(1803–1864). In the Index *Herb. Pt II* (Regn. Veg. 86) 1972, he is cited as the collector of plants in Borneo, Java, and Sumatra. To my knowledge he did not visit these islands, and the plants will have been in his private herbarium which is preserved in *Herb. Caen*.

**\*Kilang**, see Forest Dept North Borneo.

**\*Kingston, James**

District Agricultural Officer, who has collected herbarium specimens in various parts of *E. New Guinea*, including *New Britain* in the 1950s.

In 1968 living at Buderim, Queensland, Australia.

COLLECTIONS. *Herb. Lae*, >143 nos.

**\*Kinted, V.**, see Forest Dept North Borneo.

**\*Kjellman, Frans Reinhold**

(1846, Bromö, Torsö, Sweden; 1907, Uppsala, Sweden) studied botany at Uppsala University (Ph.D. 1872); from 1883 Professor of Botany there. He made botanical explorations in Spitsbergen (1872–73), and Nova Zembla (1875), and accompanied the Vega Expedition (see under ALMQUIST).

He is the author of numerous publications, mainly dealing with *Algae*.

*Kjellmania* J. REINKE has been named after him.

He collected phanerogams near Alaska,<sup>1</sup> and he might have collected others in the Malaysian region in the 'Vega' (1878–79). The botanical collections of that expedition are in *Herb. Uppsala* and dupl. in *Stockholm*.

LITERATURE. (1) Cf. E. HULTÉN in *Bot. Not.* 1940, p. 303.

BIOGRAPHICAL DATA. *Svensk Bot. Tidskr.* 1907, p. 276–285; *Svensk Vet. Ak. Årsbok* f. 1908, p. 279–300; Ymer 1907, p. 286–292; KROK, *Bibl. Bot. Suec.* 1918, p. 349–353, incl. bibliogr.

**K.K.S.S.**, stands for KOSTERMANS, KUSWATA, SOEGENG, SOEPADMO.

**\*KL nos**

a series of the Phytochemical Survey of the Federation of Malaya, was started in 1957 by MILLARD. It has been resumed by Dr J. CARRICK, Field Pharmacologist, with number 2332. Some confusion has arisen because of the three numbers attached to the old series (KL, PCS, and a herb. number). The first number, KL, is the only one that is continuous.

**\*Kleckham, F.**

collected a few plants on Mt Strong (*Papua*), end August 1963; *Herb. Lae*.

**Kleinhoonte, Anthonia**

(d. 1960, Netherlands).

BIOGRAPHICAL DATA. *Vakbl. Biol.* 41, 1961, p. 3–6.

**Kleiweg de Zwaan, Johannes Pieter**

(d. 1971, Blaricum, N.H., Netherlands).

**Kloss, Cecil Boden**

COLLECTIONS. Add: The *Christmas I.* plants (pres. 1923) were probably made by Dyak collectors (cf. *Raffles Mus. Bull.* 18, 1947).



KOCHUMMEN

**\*Kochummen, Kizhakkedathu Mathai**

(1931, Kerala, India; x), B.Sc. from the University of Travancore in 1951, came to Malaya in Dec. 1952; from 1953 onwards in the Botanical Division of the Forest Research Institute at Kepong, since Dec. 1957 Assistant Forest Botanist.

Author of several papers, mostly on forest trees; co-author of the *Tree Flora of Malaya*. He left the Forest Institute to attend the 1967/68 Diploma course in Taxonomy at Edinburgh, under the Colombo Plan. Mid-1968 he passed his examination.

COLLECTIONS. He collected some thousands of plants throughout *Malaya*; material in *Herb. Kepong*, numbered in one of the successive series (KEP and FRI); dupl. distributed from Kepong. After his return from Europe he resumed collecting.

**\*Kock, Father Cornelis Josephus Leonardus**

(1907, Breda, Netherlands; x) took his doctoral examination in social geography at Utrecht

University (1937); teacher in secondary schools in the Netherlands (at present Canisius College, Nijmegen); Professor of Geography at Djokjakarta, Indonesia, in the 1950s.

COLLECTING LOCALITIES. *Java*: Djakarta (June 1955), Bedugul (*Bali*, June 1957), G. Gedeh (June 1958), Kali Urang (Aug. and Oct. 1958,



KOOY

Jan. 1959), *Nusa Baru(ng)* and G. Kidul (Feb. 1958), Ungaran (June 1961), Djokja (Nov. 1958, Jan. and Feb. 1959). Without known year at: Angke, Bogor, Tjilintjing R., Rawa Tembaga, Depok, Bandung, G. Prahau, Lembang, Tamandjaja, and Muntilan. Also in *Sumatra*.

COLLECTIONS. In private collection; mostly common (vascular) plants. In all about 9000 specimens (260 families, c. 3000 species) of which c. 4000 from *Java* and a few from *Sumatra* and *Bali*. Some identified at Leyden, many at Bogor.

**\*Køie, Mogens Engell**

(1911, Copenhagen, Denmark; x) was educated at the University of Copenhagen (Mag. Sc. botany 1936); Assistant at the Botanical Laboratory of the University of Copenhagen 1938; Dr. phil. 1951; head of the Ecological Department 1956; Professor in Botanical Ecology 1967.<sup>1</sup> Member of the '3rd Danish Central Asian Expedition', 1948-49;<sup>2</sup> UNESCO Science Research specialist in Peru, 1956-57; from Jan. 8-Apr. 28, 1962, he participated in the Danish 'Noona Dan Expedition' (see there for Itinerary, Collections, etc.).

LITERATURE. (1) List of publications in *Dansk Bot. Ark.* 21, 1963, p. 188-189.

(2) KØIE & RECHINGER: 'Symbolae Afganicae' (in *Kongl. Dansk. Vidsk. Selsk. Skr.*).

BIOGRAPHICAL DATA. *Dansk Bot. Ark.* 21, 1963, p. 33-34.

**\*Kokawa, Shohei**

(b. 1927) of Osaka City University spent 5

months (Oct. 1968-Mar. 1969) in many areas of the state *Sabah* (N. Borneo), with ANDO and HOTTA (see there). Special attention was given to Tawau Hills and Silabukan in the south and to Kinabalu and Trus Madi on the west coast.

**Kokkelink, M. Ch.**

Add: Author of 'Wij vochten in het bos' (with biography and portr.).

**\*Kondo, Yoshio**

(1910, Kaeleku, Isl. of Maui, Hawaiian Is; x) malacologist, educated at the University of Hawaii (B.A. 1940, M.A. 1947), taking his Ph.D. at Harvard University in 1955. Previous to his university studies he was employed as a ship steward, electrician, fisherman, diesel engineer, and finally as an Assistant in Malacology in the B. P. Bishop Museum. He accompanied expeditions in Micronesia (1936), Fiji (1938), in the Trust Territories (1949, 1952), and the *Philippine-Hawaii Expedition* (1957), mainly collecting land mollusca.

ITINERARY. 1957. *Philippine-Hawaii Expedition*: leaving Honolulu (Jan. 7), arriving at Manila (9), and via Zamboanga (staying 23-26) to the *Sulu Archipelago*: *Siasi I.*, at Laminusa etc. (26-Feb. 7); *Jolo I.* (8-9); *Tawitawi I.* and *Sibutu I.* (10-22); *Taganak* (22-24, 27); *Sandakan* (*N. Borneo*, 25-27); *Cagayan Sulu* (27-28); *Palawan*: *Balabac* (Mar. 1-5), *Ursula I.* (6), *Puerto Princesa* (7, 9), *Babuing* (8); *Negros Oriental* (11-21); *Bohol* (23-24); *Cebu* (21-23); *Calamangan*, off *Leyte* (24-25); *Leyte*: *Polompon* (25) and nearby *Gigantanga I.* (26-27); *Capul* (or *Tapul I.* off *Samar* (27); *Narango I.*: *Medio* and *Rosa* (28); *Destacado I.* (28-29); *Masbate*, *Deagan I.* and *Homoraon islet* (30); *Ticao*: *Bagababoy* (31); *Burias*: *Tinalisayan* (Apr. 1); *Mindoro*: *Puerto Galera* and *Golo I.* (3); back at Manila (4).

COLLECTIONS. No botanical field note books were kept; in most instances the material was flown back to the Philippine Nat. Museum for numbering and drying there. In *Herb. Manila* and in B. P. Bish. Mus. *Herb. Honolulu*.

**\*Koningen, H.**

(1940, Amstelveen, Netherlands; x). When being in the army as a soldier, he made a small collection in New Guinea. Later gardener at Amstelveen.

COLLECTIONS. 7 plants at Remu near Sorong (Jan. 1961) and near Ifar (Cyclops Mts, July 1961), *W. New Guinea*. In *Herb. Leyden*.

**\*Kools, J. F., see J. J. F. E. DE WILDE.**

**\*Kooy, Father Cornelis Willem**

(1917, Hoorn, N.H., Holland; x), a Roman Catholic Missionary educated at Steyl and Tetringen (1942-46), from 1949 stationed in Indonesian Timor, stationed successively at Manufui (Beboki) from 1949-50, at Manumean (Beboki) from 1951-56, at Soe (S. Central Timor) from 1956-62, and at Nikiniki (S. Central Timor) from 1962 onwards.

COLLECTING LOCALITIES. *Timor*, from 1964 onwards: in the districts of Kupang, Amanuban, Amanatun, Molo, Miomafo, Insane, and North Belu.

**COLLECTIONS.** He collected 560 numbers of plants in the southern central part of the island during 1964–69 for *Herb. Leyden*; in 1972 some 150 new numbers were received.

**Koppel, Cornelis van de**

(d. 1963 or 1964, ?Bussum, Netherlands).

**BIOGRAPHICAL DATA.** Add: Versl. Treub Mij. Mei 1963–Mei 1964.

**Koster, Christiaan**

He left New Guinea October 1962; in 1969 he tried to get an employment in Surinam.

**COLLECTING LOCALITIES.** Add: **1957.** Kebar Valley, *P. Adi*.—**1958.** W. part of Arfak Plain (Sidei, Wariki) (July–Aug.), Kebar Valley (Oct.–Nov.).—**1959.** Sarmi Hinterland (Bodei) (Jan.–Feb.).—**1960.**<sup>1</sup> Starting for Mt Krabo (Arfak Mts) from Maruni (Oct. 31), collecting mainly on the crest (900–1060 m) (Nov. 1–8); leaving Mt Krabo and returning to Manokwari (9).—**1961.** Arfak Plain (Woseggi-Masni) (Feb.), *Japen I.* (Soemberbaba, Woda, Aisao) (June–July), Andai area near Manokwari (Oemboei, Andai, Oesiabi, Beri-creek, Maroeni, Warmare) (Nov. 10–Dec. 17).—**1962.** Wandammen Peninsula (Wondiwoi Mts, Wasior) (Feb. 24–Mar. 16), Arfak Mts with CHR. VERSTEEGH (see there) (May 16–28),<sup>2</sup> Andai area (Warmare) (June 20–26), *Meos Noem* (July 31–Aug. 11).—From **1957–62** in the surroundings of Manokwari.

**LITERATURE.** (1) CH. KOSTER: 'Verslag van een tournee naar het Krabo-gebergte' (Manokwari, 3 pp., typewritten); cf. also W. VINK in *Nova Guinea*, Bot. 22, 1965, p. 492, fig. 6.

(2) Cf. W. VINK in *Nova Guinea*, Bot. 22, 1965, p. 493.

**Kostermans, André Joseph Guillaume Henri**

Add: In summer 1962 in Europe, in 1967 in Europe and the U.S.A., in 1971–73 he worked in Europe, viz at Leyden, Aarhus, Kew, Paris, and Zürich.

**COLLECTING LOCALITIES.** **1952.** Suppl. Cycl. Fl. Mal. I, 5, p. (59)b 3rd line from top, Peak of Balikpapan, add: G. Beratus.—**1958.** *W. Java* and *Prinseneiland*; *Bali*: Bedugul (June).—**1960.** *W. Java*: Tandjung Lajar, *P. Peutjang*, and Ujung Kulon (July); Tjibodas (Sept. 13).—**1961.** Leaving Tandjung Priok (Mar. 27) in the 'Samudera' with 2 'mantri's' of the Herbarium, 3 students (SUJARTA, PRIJANTO, WIRAWAN), to *Sumbawa*:<sup>4</sup> touching Bandjerimasin (30), Surabaya (Apr. 1–), paying a visit to the Bot. Garden at Purwodadi; arrival at Sumbawa Besar (7), Badas; making collections at: 8 km E of Sumbawa Besar (8–9); Semongkat, 17 km W of Sumbawa Besar (11–12); Batudulang on the slope of the Batulanteh, W of Semongkat (12–18), from c. 700-summit (1200 m); trail to Punih, 600 m (19); between Semongkat and Batudulang (20–21); in mountain forest from Batudulang to Brangbossang, 700–900 m alt. (22–25); bivouac at Brangbossang, 800–900 m alt. (26), and from 800–1200 m (26–28); N of Batudulang, Mt Samperolat, 500–800 m (Apr. 29–May 6) in drier forest; to Pusu on the NW. side of the mountains, 500 m alt. (May 7–11); back to Batudulang and Semongkat (12), 200–500 m alt.;

Apr. 27 they were joined by 2 Russians, Dr A. FEDOROV (Curator of the Leningrad Herb.) and Dr KABANOV of the Forestry Service, accompanied by KUSWATA (see there) of Herb. Bog. *SW. Java*: near (Lake) Rawah Danau (July 19–20). In the same year for the 2nd time to *Sumbawa*:<sup>4</sup> leaving in the 'Samudera' (Oct. 14) with several others, including Mr MAMAD, assistant of the Bot. Div. of the Forest Research Institute at Bogor; Oct. 19–Nov. 8 was spent in the field, collecting in the same places as earlier in the year in order to get fertile material of those species which were not in flower or fruit the first time. *W. Java*, Bantam: lower W. slope of Mt Hondje (Dec. 28–Jan. 2, 1962).—**1963.** *Kalimantan* (former Dutch Borneo): leaving Bogor (Sept. 12) for a tour to the Berau region (NE.): from Tandjong Redeb to Long Lanuk on the Sg. Kelai; base bivouac at the foot of Mt Njapa (limestone), where he fell ill and returned to Tg Redeb, in the meantime Mr SIM leading field operations; later in lowland forest N of Teluk Bajur and in swamp forest along Sg. Segi (collecting over 700 field nos); on Nov. 14 back at Bogor.—**1964.** *W. Java*: Mt Pangrango (Feb.); Mt Pajung and Ujung Kulon Reserve (Dec.).—**1965.** *Flores*. With N. WIRAWAN, leaving Bogor (Mar. 20); Waingapu (*Sumba*), Ende, to Mborong (S. Manggarai); base camp at Kisol, exploring the Mt Ndeki complex; Wae Rana and explorations southwards to the coast; Ruteng, exploring the forest up to 2400 m; swamp forest W. of Mborong; WIRAWAN to Rana (= lake) Mesé near Sita mountains above Ruteng, and further to the North, to Reo; June 2 back at Bogor. In Dec. a short trip to *Central Sumatra* was made in company of Mr JAHN (a German forester) and a team of Japanese foresters.—**1966.** *Expedition to W. Irian* (for collecting plants causing permanent or temporary sterility in women): *SW. Celebes*: Bantimurung near Makassar (July 20); *Irian*: surroundings and in the valleys of Sukarnapura (= Hollandia) (July 25–Aug. 15); vicinity of Lake Sentani and Sukarnapura (Aug. 16); Sukarnapura (17); Dosai, E of Sukarnapura (18); Abepura near Sukarnapura (19–20), Sukarnapura (21); Dosai (22–25); Baliem valley, surroundings of Wamena and Wellesey up to 2500 m (26–Sept. 3); *P. Biak*: Bosnik (Sept. 9); Parieri (9–13); *P. Morotai* (16).

**COLLECTIONS.** Add: The Russians (guests of the Council for Sciences) who joined the *Sumbawa expedition* (1961) would get a set of the collection, nos 18001–18865; the expedition was financed by the Council. In *Flores* (1965) 1300 nos were collected (about 6 dupl. sets); in *W. Irian & Biak* (1966) 1000 nos.

The numbers 11000–12000 were given to living plants; in *Hort. Bog.*

**LITERATURE.** (2) Add: For sketch map of his route in the Arfak Mts, and comments on labels etc., see W. VINK, *Nova Guinea*, Bot. 22, 1965, p. 488–489, fig. 3.

(4) Cf. Fl. Mal. Bull. no 16, 1961, p. 802; A. J. G. H. KOSTERMANS: 'Notes on the Vegetation of W. Sumbawa (Indonesia)' (Symp. Ecol. Res. Humid Trop. Veget. Kuching 1963; UNESCO Sc. Coop. Off. SE. Asia 1965, p. 15–25, 2 fig.).

\*Koyama, Hiroshige

(b. 1937), a member of the Kyoto University



Biological Expedition to Thailand and Malaya, 1967, who paid special attention to cytotaxonomy.

ITINERARY. See *sub* K. IWATSUKI.

COLLECTIONS. 1st set in *Kyoto Herb.*; 2nd set in *For. Herb. Bangkok.*

**\*Kraepelin, Emil**

(1856, Neustrelitz, Germany; 1926, Munich, Germany) studied medicine in Würzburg and Leipzig, specializing in neurology and psychiatry, and working in Leipzig, Munich, and Dresden. In 1886 Professor of psychiatry at Dorpat University, from 1891–1903 at Heidelberg, and from 1903 in Munich.

Having a large interest in nature, he often accompanied his elder brother KARL (see there) on tours in the alps, the Mediterranean, etc., and in 1904 to the tropics (see below). Whereas KARL made the zoological collections, EMIL took care of plant collecting, at least in 1904.

Though his publications exclusively deal with his discipline, he wrote a diary (letters to his wife) during his tour to the East, which was preserved.<sup>1</sup>

ITINERARY.<sup>1</sup> 1904. By ship (Dec. 23, 1903) from Genoa to Ceylon (staying Jan. 10–Feb. 4), paying a visit to S. India (Jan. 29–Feb. 1); proceeding to *Singapore* (staying Feb. 13–19); Botanic Garden, Bt Timah (15), Serangoon R.; *West & Central Java* (Feb. 21–Apr. 1): Buitenzorg Botanic Garden, Tjampea (Mar. 11), Borobudur (17), G. Papandajan (22), Situ Bagendit (23), Tjibodas (24–29), Tjibadak and G. Gedé (26), G. Pangrango (27), Tjibörröm (= Tjibeureum) (29), Buitenzorg (30); sailing Apr. 2, making short stays in *Penang* and Colombo, reaching Genoa on Apr. 28.

COLLECTIONS. *Herb. Munich* (see *Liter.* 1, p. 25).

LITERATURE. (1) H. WEIDNER: 'Karl und Emil Kraepelin's Studienreise nach Indien und Java im Jahre 1904. Aus dem Briefstagebuch von Emil Kraepelin ausgewählt, eingeleitet und mit Anmerkungen versehen' (Abh. Verh. Naturw. Ver. Hamb. 16, 1972, p. 19–72, 12 Abb., 2 Karten).

BIOGRAPHICAL DATA. Cf. *Liter.* 1, p. 21–25, 72, w. portr.

**\*Kraepelin, Karl**

(1848, Neustrelitz, Germany; 1915, ?Hamburg, Germany) studied mathematics and natural sciences at Göttingen and Leipzig; from 1873–78 teacher in natural history in Leipzig, and subsequently in Hamburg; from 1887 professor and since 1889 Director of the Natural History Museum in Hamburg. In later years his mainly zoological interest turned to ecology. He extensively travelled, often accompanied by his younger brother EMIL (see there).

Author of numerous zoological publications.<sup>1</sup>

ITINERARY & COLLECTIONS. See under E. KRAEPELIN. Botanical collections were presented to the Museum in *Hamburg*. As far as can be surmized from his brother's diary, botanical collections in the East (1904) were made by EMIL.

LITERATURE. (1) Also of 'Naturstudien in fernen Zonen. Plaudereien in der Dämmerstunde' (Leipzig & Berlin 1911). It contains little information on the voyage to the East.

BIOGRAPHICAL DATA. Abh. Verh. Naturw. Ver. Hamb. 16, 1972, p. 21–25, w. portr. & bibliogr. (p. 71–72); *l.c.* p. 72.

**Kreulen, D. J. W.**

= Dirk Jan Willem.

**Kryshtofovich**

= KRISCHTOFOVICH, African Nikolaevic (1885–1953).

**\*Kurata, Shigeo**

of the Insectivorous Plants Society, Dept of Biology, Nippon Dental College, Fujimi, Tokyo, Japan, made two expeditions to the Philippines in search for *Nepenthes*.<sup>1</sup>

COLLECTING LOCALITIES. *Philippines*: 1965. *Mindanao* (Surigao del Sur: E. slope Mt Legaspi, Camp David, and near Carrascal Bay) and *Luzon* (Mountain Prov., 3 weeks in Aug.).—1967–68. *Mindoro* (Dec.–Feb.): Mt Kidayap.

LITERATURE. (1) S. KURATA & M. TOYOSHIMA: 'Philippine species of *Nepenthes*' (Gard. Bull. Sing. 26, 1972, p. 155–158).

**\*Kuripin**, see Forest Dept North Borneo.

**Kurz, Wilhelm Sulpiz**

BIOGRAPHICAL DATA. Add: Ind. Forester 4, 1878, p. 1–4.

**\*Kuswata Kartawinata, E.**

(1936, Java, Indonesia; x), B.Sc. of the Tjiawi Academy of Biology (1959); since then Assistant Botanist of the Herbarium Bogoriense. He left for the University of Hawaii in February 1965 to major in ecology, taking his Ph.D. In 1973 temporarily working for BIOTROP at Bogor.

COLLECTING LOCALITIES. 1958. *Bali* and *Java* (see *sub* SOEPADMO).—1959. *W. Ceram*: village Gemba, Kairatu (June 1–21); Waiselang, Kairatu (22–26); *Amboina*: Mt Salahutu (July 5–20), and elsewhere (July 22–Oct. 8); *W. Java*: Bogor and Tjibodas.—1960. Together with KOSTERMANS at Udjungkulon (Aug. 13–21, Oct. 13–14).<sup>1</sup>—1961. *W. Sumbawa*: Batulante (May 1–4), Olat Sekampil (13), Semongkat Atas (13–14), Batugong, W of Sumbawa Besar (23); *W. Java*: Udjungkulon (June 15–17).

COLLECTIONS. Partly made together with SOEPADMO (see there), and nos 1–242 (*W. Ceram*), 243–305 (*Ambon*), 85–290 (*W. Sumbawa*), etc.; in *Herb. Bog.*

LITERATURE. (1) E. KUSWATA KARTAWINATA: 'Notes on the Vegetation of Peutjang Island (SW. Java) (Symp. Ecol. Res. Humid Trop. Veget. Kuching 1963; UNESCO Sc. Coop. Off. SE. Asia 1965, p. 26–30).

**Kuyper, H. P.**

= Hendrik Pieter.

**Kuyper, Jan**

(d. 1969, Groningen, Netherlands).

BIOGRAPHICAL DATA. Jaarb. Versl. & Meded. Kon. Ned. Bot. Ver. over 1970, 1971, p. 5.

**\*Kwok, S.**

and Philippine collectors, collected 844 plants;



*Herb. Lingn. Un. Canton.* See Index Herb. Pt II (Regn. Veg. 86) 1972.

**\*Laan, A. C. van der**  
former employee of the Rijksherbarium at Leyden, collected some plants at Port Swettenham, *Malaya*, in April 1962; 8 nos in *Herb. Leyden*.

**LAE nos**  
After no 50,000 the series letters NGF (New Guinea Forces, later New Guinea Forests) were changed into LAE.

**Lahaie, Félix de**  
COLLECTING LOCALITIES. Add: Some plants labelled 'Java', virtually came from Mauritius.

**\*Lajangah**, see Forest Dept North Borneo.

**Lam, Herman Johannes**  
retired in 1962.  
COLLECTING LOCALITIES. Add: 1962. *Malaya*: during the UNESCO limestone Expedition in Ulu Kelantan (July 24–Aug. 18).  
BIOGRAPHICAL DATA. *Blumea* Suppl. 4, 1958 (Jubilee vol.), p. 1–16, bibliogr., portr.

**\*Lancaster, C. R.**  
an Army officer; he collected some plants in the Cameron Highlands, summit of G. Batu Brinchang at 6666 ft, *Malaya* (Mar. 1–3, 1958); *Herb. Leyden*.

**\*Landingin, G.**, see Philippine National Herbarium.

**Landon, Sylvanus**  
settled at Banjar = Bandjermasin, SE. Borneo in 1700 (cf. letter from JAMES CUNINGHAME to PETIVER, SLOANE MSS 3321, folio 52, British Museum). The collecting locality 'Doole' (see *sub* S. LANDMAN in Cycl. Fl. Mal. I, 1, 1950, and *sub* S. LANDON in Suppl. Cycl. *ibid.* I, 5, 1958, is rightly the oldest Portuguese settlement in *Solor*, *Lesser Sunda Islands*.

**Lane-Poole, Charles Edward**  
(d. 1970, Sydney, Australia).  
BIOGRAPHICAL DATA. Commonwealth For. Rev. 50, 1971, no 143, 3 pp., portr.

**\*Lang, William Henry**  
(1874, Groombridge, Sussex, England; 1960, Milnthorpe, Westmorland, England), M.B., B.Sc., D.Sc. (1900) at Glasgow, Senior Assistant to Professor of Botany, subsequently Lecturer, Bot. Dept. University of Glasgow, 1890–1908; Professor of Cryptogamic Botany, Manchester University, 1908–1940. One of his interests was palaeobotany.

He paid a short visit to *Malaya* when he went to Ceylon, early in this century (1900).

COLLECTIONS. In *Herb. Glasgow*: small collection of ferns from *Malaya*: dupl. presumably in *Manchester* (Prof. R. E. HOLTUM *i.l.* June 24, 1958), but according to Prof. D. H. VALENTINE no ferns in *Manchester*, but a lot of bryophyte material.

BIOGRAPHICAL DATA. DÖRFLE, *Botaniker-Adressbuch* 2nd ed. 1902, p. 110; C. W. WARDLAW contributed to Nat. Dict. Biogr. (1962).

**\*Langdon, Raymond Forbes Newton**  
(1916–x) collected in *New Guinea* and *Queensland* (1940–56); *Herb. Univ. Brisbane. Fungi* only?

**\*Larsen, Egon**  
(1928, Denmark; accidentally killed in vehicle accident April 1969, Celebes (Sulawesi), Indonesia) took his M.Sc. in Forestry in Copenhagen; Scientific Officer, Forest Research Institute, New Zealand Forest Service, 1954–62; in the Seeds Section of the Forest Research Institute, Canberra, Australia, 1962–69.



KUSWATA KARTAWINATA

He undertook seed collection expeditions to U.S.A. (1956), Mexico (1961), Timor and Flores (1968), and finally to Celebes (1969), especially for collecting *Eucalyptus*.

He was a member of the FAO Panel of Experts on Forest Gene Resources.

COLLECTING LOCALITIES. 1968. *Lesser Sunda Islands* (July–Aug.): *Timor*, both Portuguese and Indonesian parts: NW. part of Portuguese Timor, collecting along the road from Dili to Maubisse (Turiscari) and from Dili to Ermera (both from sea-level to 5000 ft); by road from Dili to Kupang; by air to *Flores*, travelling by car from Ende to Larantuka.—1969. *SW. Celebes*. South and west of Palopo (Apr.).

COLLECTIONS. *Eucalypts* in *FRI Herb.*,

*Canberra*. In *Celebes* also specimens of *Casuarina sumatrana* were collected.

**Lasschuit, J. A.**

(cf. Suppl. Cycl. Fl. Mal. I, 5, 1958) was *not* an employee of the Forestry Service, but a collector in the BW series.

**Latif, Soetan Mahmood**

LITERATURE. (1) Add: 'Two orchids of Indonesia' (Amer. Orchid Soc. Bull. 35, 1966, p. 907-909, 2 fig.).

**\*Laverock, W. S.**

M.A., B.Sc., a former Keeper of the Department of Botany in the Public Museums, Liverpool, England.

Plants from *Malaya* have been in *Herb. Mus. Liverp.* (see Handbook and Guide to the Herbarium Collections in the Public Museums Liverpool 1935, p. 71); destroyed during World War II.

**Laycock, John**

(d. Dec. 3, 1960, aged 73).

**Layosa, Helen S.**

Add: Instructor of Agronomy; in the 1960s Assistant Professor at Los Baños College of Agriculture. She took her Ph.D. in Florida.

**\*Lazaro, J.**, see Forestry Bureau, Manila.

**\*Lazo, P. P.**, see Philippine National Herbarium.

**\*Leach, G.**

of the Div. of Botany, Lae, *New Guinea*, collected with R. PULLEN (see there) on Mt Suckling in 1972.

**Leaño, Forestry Bureau, Manila**, read: E. C. LEAÑO.

**Lecomte, Henri**

BIOGRAPHICAL DATA. Add: *Adansonia* 2, 1962, p. 147-159, portr.

**Ledoux, Jacques Alphonse**

Add: (1880, Liverpool, England; Apr. 1, 1961, Johore Bahru, Malaya). From his youth he had an interest in plants. He volunteered for service in the war in S. Africa, remaining in that country until 1906, when he went to Malaya. From tin-mining in Johore he soon turned to rubber-planting in the Kota Tinggi District, where he remained for the rest of his life.

BIOGRAPHICAL DATA. Gard. Bull. Sing. 18, 1961, p. 328-329, portr.

**\*Ledyard, E. M.**

Plants from the *Philippines* (1909-10) in *Herb. Ann Arbor*. (300).

**\*Lee Koh Hat**, see Forest Dept North Borneo.

**\*Lee Wai Chin**, see Miss GEH SIEW YIN.

**Leefers, Cornelus Leonardus**

(1909, Soerabaja, Java; 1962, Ibadan, Nigeria), educated at Wageningen Agricultural College. Tea

planter (1938-41); in the Dutch East Indian Army (1941-42), P.O.W. in Japan, 1942-45; in the army again, 1945-47; from 1948 in the Forestry Service of the Dutch East Indies and Indonesia. From 1952-60 Conservator of Forests (Opperhoutvester) and Inspector of the Service in West New Guinea, finally stationed in Biak. Repatriated Sept. 1960.

**\*Leeuwen, Arie van**

(1915, Meerkerk, Z.H., Netherlands; x), educated at Wageningen Agricultural College. In September 1956 he went to Dutch New Guinea (Hollandia) as Inspector of the Veterinary Department.

COLLECTING LOCALITIES. 1957. *W. New Guinea*: Kebar Valley (Oct. 25); Kabara, Waigeo(u) (Oct.-Nov.); Kofiau I., W of New Guinea (Nov. 22).—1958. *W. New Guinea*: Baliem Valley (Mar.).

COLLECTIONS. He collected on behalf of the Forestry Service; *Herb. Manokwari* and *Leyden*.

**\*Leigh, P.**

collected sugar-cane varieties along the banks of the Laloki River near Port Moresby (cf. Cane Growers' Quart. Bull. Brisbane 15, 1951, p. 42).

**\*Lele(a)n, Yakas**

(1937, Aregena, Terr. of New Guinea; x), a good field assistant at Lae, who collected with others in the NGF series.

**\*Lennox, Colin Gordon**

Honolulu, was sponsored by the Hawaiian Sugar Planters' Association for the collecting of seeds of wild relatives of the sugar cane in 1937.<sup>1</sup> He was accompanied by C. E. PEMBERTON (see there for collecting localities *etc.*). No herbarium collections were made.

LITERATURE. (1) C. G. LENNOX: 'Sugar cane collecting in New Guinea during 1937' (Hawaiian Plant. Rec. 42, 1938, p. 235-246).

BIOGRAPHICAL DATA. Amer. Men of Science 1949.

**Leschenault de la Tour, Louis Théodore**

In the Library of the Rijksherbarium, Leyden, there is a bound copy of a handwritten MS titled "Liste des Plantes de l'Isle de Java observées par M. Lechenault de Latour". It contains descriptions and notes in French of 693 species and is dated "Samarang, 5.7bre, 1806". This is obviously *not* an original MS but a copy made by a clerk of "Het Marineschool te Samarang" which did also work for NORONA, and where the plates of LOUIS DESCHAMPS were copied.

Several of his papers were translated in English for Colonel COLIN MACKENZIE by his Dutch translator L. R. BURKE. It forms parts of a whole body of MSS which were collected in Java during the first couple of years of the British Administration (now in India Office Library, London). In one volume BURKE has inscribed in his own hand: "Some of the LESCHENAULT Memoirs were translated into Dutch for Mr M. ENGELHART by whom Mr LESCHENAULT was employed" (MACKENZIE collection, private, vol. 37, 'Collection on the Natural History of Java', 296 folios of which 194 by LESCHENAULT; Dr JOHN BASTIN *i.l.* July 1970).

**ITINERARY.** *Additional to the data mentioned in Cycl. Fl. Mal. I, 1, 1950, p. 321a* the following can be derived from the MS mentioned above: Many plants from the vicinity of Soerabaja, Grisse (together with the Resident 'KAREL VAN NAERSEN'), *Madoera I.* (nos 203–400, Sumenep and islet 'Mimding'hine' before the coast), Banjuwangi (nos 401–574), climbing Mt Idjen with Commander 'VIKERMANN' (nos 575–663), Westcoast of Bali (nos 575–581). He visited also Mt 'Onorang' near Semarang (Mt Ungaran). The final few numbers 688–693 are from the environs of "Melam" which I cannot locate. He was obviously acquainted with, or even met, HORSFIELD.

**LITERATURE.** (11) Add: 'Dessins de plantes de Java' (fol., cart.; 55 plants of which the numbers correspond with those of his journal and herbarium).

**Lesson, Pierre Adolphe**

**LITERATURE.** (4) Add: For particulars on the botanical drawings see CL. NISSEN, 'Die botanische Buchillustration' 1951, vol. 2, p. 53 *sub* DUMONT D'URVILLE.

**BIOGRAPHICAL DATA.** In Bibl. Austr. Entom. 1775–1930 (R. Zool. Soc. N.S.W. 1932, p. 199).

**\*Levinge, Harry Corbyn**

(1831–1896). His large private herbarium is in Dublin, but plants from *Malaya* are recorded at *Kew Herb.* See Index Herb. Pt II (Regn. Veg. 86) 1972. Probably the Malayan specimens have been presented to him.

**\*Lewis, S. H., see S. R. J. WHITE.**

**\*Lichanco, J.**

*Philippine plants* in *Herb. Ann Arbor.* See Index Herb. Pt II (Regn. Veg. 86) 1972.

**\*Lichtenthaler, Dr H. K.**

botanist of the Bio-Organic Chemistry Group, 1557 Life Sciences Building, Berkeley (Calif.), planned to visit Bogor in Jan. 1964, to collect orchids, ferns, *Araceae*, etc. on his return to Heidelberg, Germany, by way of the Far East.

**Lillez (or Lilles?), Leonardo**

mentioned under LILLES in *Cycl. Fl. Mal. I*, 1, 1950, evidently collected several plants for the Bureau of Agriculture at Manila in March 1909.

**Lindenbaum, see GLASSE, S. H.**

**Lix**

Add the initials H. W.

Also plants from *NE. New Guinea (New Britain)*. See Index Herb. Pt II (Regn. Veg. 86) 1972.

**Llanos, Antonio**

When revisiting Madrid in 1958, Dr E. QUI-SUMBING studied his collection and selected lectotypes for *Herb. Manila*.

**\*Llobrera, C.**

*Philippine plants* in *Herb. Ithaca.* See Index Herb. Pt II (Regn. Veg. 86) 1972.

**\*Loatoc, A.**

*Philippine plants* in *Herb. Ann Arbor.* See Index Herb. Pt II (Regn. Veg. 86) 1972.

**\*Loeters, Johannes Jacobus**

(1913, Didam, Netherlands; x), Roman-Catholic priest. Following his theological education (at Teteringen) he attended the Agricultural School (Koloniale Landbouwschool) at Deventer. Since 1945 stationed at Nita, Flores (Lesser Sunda Is.), teaching at an agricultural school.



LOETERS

**COLLECTING LOCALITIES.** *Lesser Sunda Is.* since 1952, mainly in *Flores* (Badjawa, Maomere, Nita, Ruteng, Hokeng, Geli Mutu (30 March 1962) Larantuka, etc., but also on some nearby islets, viz: *P. Paloë* (N of Flores), *P. Lomblen* (Apr. 1962), *P. Solor* (May 3, 1962).

**COLLECTIONS.** He owns a private herbarium of c. 1000 numbers (with 1 or 2 dupl.) of *Flores* plants (end 1967: nos 1001–2230). For private use. Some dupl. were sent to *Leyden Herb.*

The numbers S 50 and S 57 *leg.* SCHOUTEN (July 4, 1961).

**Lörzing, J. A.**

**LITERATURE.** (6) Reference must read: 'Sumatra' instead of 'Sumatra Post'.

**\*Loh Hoy-Shing**

Assistant of the Forest Research Institute, Kepong, Malaya.

**COLLECTING LOCALITIES.** 1969. *Malaya.* Selangor, Gading F. R. with CHAN.—1970. Gua Peningat, Pahang (July).

**COLLECTIONS.** In *Herb. FRI Kepong*.

**Loher, August**

**COLLECTING LOCALITIES.** Add: Plant specimens collected in April 1906 are often labelled 'Rio Ampalit' in Rizal Province. This locality refers to a large stream Dampalit (the Tagalog name for river) on the N. side of Mt Makiling in Laguna prov. (not Rizal).

\*Lomibao, Benigno A.

collected for and with WILLIAM L. STERN (see there).

Loreja, Miss Milagros

Add: In 1966 in Stanford, U.S.A., taking courses in botany.

\*Lorenzo, H., see Boswezen Nieuw Guinea.

Loria, Lamberto

ITINERARY. Cycl. Fl. Mal. I, 1, 1950, p. 330a, 1st line from above, after 'Goodenough I.' add: (Jan. 13-18).

Lorrain, W. B.

COLLECTIONS. Add: Also ferns in *Herb. Edinb.*, a.o. with Thomas Moore's fern herbarium, Gourlei herbarium, and Kew dupl. According to Index Herb. Pt II (Regn. Veg. 86) 1972, a Herb. Lorraine is in Inst. Bot. Nancy. It is not known to me whether one and the same person is involved.

Lotsy, Johannes Paulus

BIOGRAPHICAL DATA. Add: in Dictionary of Scientific Biography, New York, vol. 8, 1973.

Low, Henry Stuart, see STUART HENRY LOW.

Low, Hugh

Correct: Trained to take over the Clapton Nursery, but then sent to the Orient for the collection of plants and seeds for his father (HUGH LOW SR)'s nursery at Clapton. He reached Singapore on Nov. 23, 1844, disembarked on the 25th. From 18-22 Dec. he met his brother STUART there, and together they had one day's collecting.<sup>7</sup>

On Jan. 1845 he arrived at Kuching, Sarawak, made friends with Rajah JAMES BROOKE, and with few breaks remained in Borneo for 28 years. Appointed Colonial Secretary of Labuan under BROOKE in 1847, arrived there 1848, and stayed until 1876 (with leave in England in 1861 and 1876). Resident of Perak 1877-88 (introducing the first *Hevea* rubber to Malaya, and later to Singapore and Java); sent to Brunei to negotiate treaty with the sultan in 1889; retired to England 1889.

ITINERARY. Add: He stayed for 30 months in Sarawak, being back in England in Oct. 1847.

COLLECTIONS. He also made entomological collections, among which some remarkable butterfly collections.

LITERATURE. (3) Add: Cf. H. Low, Sarawak etc. (London 1848), p. 350-406.

(7) C. F. COWAN: 'Sir Hugh Low, G.C.M.G. (1824-1905)' (J. Soc. Bibliogr. Nat. Hist. 4, 1968, p. 327-343).

BIOGRAPHICAL DATA. J. Soc. Bibliogr. Nat. Hist. 4, 1968, p. 327-343, w. portr. from 1848.

Low, James

COLLECTIONS. Also dupl. in *Herb. Edinb.*, incl. ferns with Herb. Greville.

Low, Stuart Henry

correct for HENRY STUART LOW (cf. J. Soc. Bibliogr. Nat. Hist. 4, 1968, p. 328). 2nd son of HUGH LOW (1793-1863), Nurseryman of Clapton

Nursery, was privately educated; joined the merchant navy. Returned to Clapton in 1845, assisting his father and taking over the Nursery on his death in 1863.

He grew many plants sent home from Borneo by brother HUGH. The *Dendrobium microglaphys* RCHB. f. cited from Borneo (STUART LOW 1865), mentioned in the Cyclopaedia, was certainly grown at Clapton and not collected by himself.

BIOGRAPHICAL DATA. C. F. COWAN in litt. Feb. 12, 1968.

\*Lüning, Björn Erik Gustav

(1929, Stockholm, Sweden; x), Organic Chemist (Dr hab. 1960) at the University at Stockholm; since 1967 Associate Professor; specialist on the alkaloids of *Orchidaceae*. He made expeditions to Panama (1964) and New Guinea (1967).<sup>1</sup>

ITINERARY. 1967. *Papua and New Guinea* (June-July): Lae area, Wau area, Wagau area, Wampit area, Mt Hagen area.

COLLECTIONS. Large amounts of one species for chemical investigation, and reference plants to the live collection of the Institute of Organic Chemistry at Stockholm University in connection with alkaloid screening of species (c. 250 *N.G.* species). At least some plants in *Herb. Lae*.

LITERATURE. (1) Articles on the journeys in Orchid Review. Author of many phytochemical papers on orchids.

\*Luerssen, C.

probably Christian (1843-1916), the well-known pteridologist. In the Index Herb. Pt II (Regn. Veg. 86) 1972 he is recorded as a collector in *Banka* in Polynesia (r. 1880). Luerssen was professor of botany at Koningsbergen from 1888-1910, and he is the author of some papers on Polynesian ferns, but to my knowledge he did not collect in Polynesia or Banka himself.

\*Lugtmeyer, H. W., see Boswezen Nieuw Guinea.

The right initials, instead of C. (in Suppl. Cycl. Fl. Mal. I, 5, 1958).

\*Luitjes, J., see Boswezen Nieuw Guinea.

\*Lunau, see Forest Dept North Borneo.

Lundquist, Erik

BIOGRAPHICAL DATA. Add: In ST. BERGMAN: 'Vildar och Paradisfoglar' 1950, p. 41-47, portr. following p. 32.

McAdam, James Bannister

(d. early 1959, Brisbane, Queensl., Australia).

McClure, Floyd Alonzo

(rightly: 'Mc' and not 'Mac', b. 1897; d. 1970, Bethesda, Maryland, U.S.A.). Well-known expert on bamboos.

BIOGRAPHICAL DATA. Amer. Men of Science, Phys. & Biol. Sc. 11th ed. 1966; Taxon 20, 1971, p. 777-784, portr., bibliogr.

MacGillivray, John

LITERATURE. (2) Add: M. BASSETT: 'Behind the Picture. H.M.S. Rattlesnake's Australia and New Guinea Cruise' (Oxford Univ. Press Melbourne 1966, with 2 maps).

BIOGRAPHICAL DATA. Add: Portr. in H.M. WHITTELL, 'The Literature of Austral. Birds' 1954, pl. 26, opposite p. 116, and see pt 2, *l.c.*, p. 465-466.

**MacGregor, Richard Crittenden**

COLLECTIONS. At the end add: *Herb. Edinb.*

**McIntosh, Donald Henry**

Add: Author of 'The effect of man on the forests of the Highlands of Eastern New Guinea' (Symp. Humid Trop. Veget. Unesco, Goroka 1960, 1963, p. 123-126).

**\*MacKaughan, Dr Harold**

Head Department of Linguistics of Hawaii University. He evidently visited the *Philippines*, where he collected plants of Lanao del Sur (*Mindanao*) with Maranao names in July 1964. They were identified by D. MENDOZA.<sup>1</sup>

LITERATURE. (1) H. P. MACKAUGHAN & B. A. MACARAYA: 'Maranao plant names' (Oceanic. Linguist. 4, 1965, 112 pp.).

**McKee, H. S.**

Add: joined the C.N.R.S. at Noumea, New Caledonia (Fl. Mal. Bull. no 20, 1965, p. 1241).

**\*MacLagan, Dr**

COLLECTIONS. In *Herb. Edinb.* from India and *Malay Peninsula* (cf. Index Coll. Edinb. Herb. 1970, p. 106).

**MacTier, W. F.**

His ferns were collected in 1865 (see Cycl. Fl. Mal. I, 1, 1950 under Mactier).

**\*McVeagh, David**

Technical Officer with the Forest Department, collected few specimens in the NGF series in Waitape area, Centr. Division, *E. New Guinea*, in 1959. See also E. C. MCVEAGH. *Herb. Lae*.

**\*McVeagh, E. C.**

? Same as above and initials possibly wrongly read. Said to have collected in the NGF series near Oriomo River, *E. New Guinea*, June 1960.

**\*MacVean, Dr Donald N.**

one of the staff members working under Dr D. WALKER (see there). He collects plants in *E. New Guinea*. In May 1967 he had just left for Mt Wilhelm;<sup>1</sup> he also collected on Mt Giluwe, S. Highlands, and in 1969 he accompanied Dr B. O. VAN ZANTEN (see there) to *E. New Guinea* (June-July).

COLLECTIONS. In *Herb. Univ. Canberra*, numbered in the ANU series (Australian National University).

LITERATURE. (1) L. K. WADE & D. N. MCVEAN: 'Mt Wilhelm studies I. The alpine and subalpine vegetation' (Res. School Pacif. Stud. Dept. Biogeogr. & Geomorph. Publ. BG/1, 1969, 325 pp.) (Austr. Nat. Univ. Press).

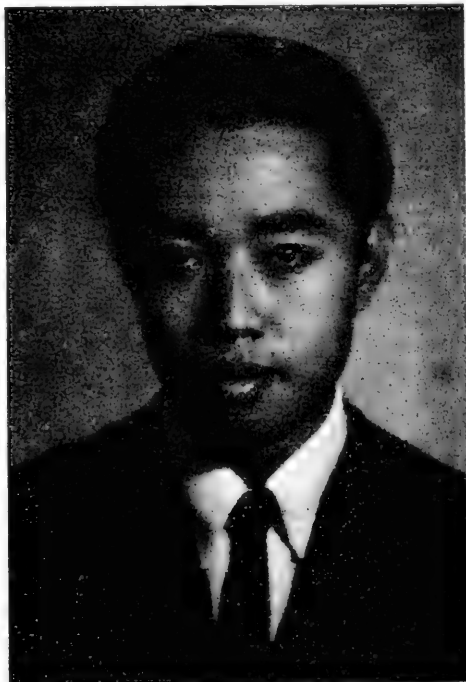
**\*Madani, L.,** see Forest Dept North Borneo.

**\*Madulid, Domingo Allado**

(1946, Laoag, Ilocos Norte, Philippines; x), B.S. (Botany) University of the Philippines (1967),

M.S. (Botany) University of Sto. Tomas (1971); Museum Researcher in the Philippine National Herbarium, Manila.

COLLECTING LOCALITIES. *Philippines*. 1968. *Luzon*: Mt Data National Park, Mt Province (Nov.; regeneration of oaks).—1969. *E. Mindoro*: Mt Iglit Game Refuge and Bird Sanctuary (May-June).—1970. *S. Samar*: Mt Sohoton (Mar.-Apr.; ecology), with H. G. GUTIERREZ.—1971. *Luzon*: Bo. Guina-ang, Bontoc, Mt Prov. (ethnobot. coll. with Dr L. REID; Apr.). *S. Samar*: Guinmayuhan, Balangiga (May). *Luzon*: Ilocos region (I. Norte & La Union), for sand-binding grasses.



D. A. MADULID

COLLECTIONS. *Herb. Manila* (Phil. Nat. Herb.), c. 2000 flow. plants, 200 ferns, 200 *Algae*, *Fungi* and mosses. The *Samar* duplicates will be distributed to foreign herbaria.

**\*Mahmud, S.**

collected with SAMSURI in 1970-71, in Selangor and Perak.

**\*Mahmud bin Awang,** see sub KADIM BIN TASSIM.

**\*Mahuze, B.,** see Boswezen Nieuw Guinea.

**\*Maidin, S. Mohammed,** see Forest Dept North Borneo.

**Mangold, Rudolf Paul**

Add: For some annotations on the collecting localities in the Arfak Mts see W. VINK in *Nova Guinea*, Bot. 22, 1965, p. 491-492, fig. 5.

**\*Manner, Harley Ichiro**

(1941, Honolulu, Hawaii, U.S.A.; x), geographer, B.A. University of Hawaii, currently (1968) working on M.A. and Ph.D. in Geography at Hawaii University. He accompanied Dr JOHN M. STREET (see there) as Research Assistant to New Guinea, to gather data on morphology, structure, and floristics of the savannah and forest vegetation. Publications will follow.

COLLECTING LOCALITIES. *Terr. of New Guinea* (Mar. 1967–Feb. 1968): in the vicinity of Kupeng, Kompiai, Koinambe and Tsuenkai of the Jimi Valley, Western Highlands District.

COLLECTIONS. Nos 1–599 in *Herb. Leyden, Lae*, and in *Hawaii Geogr. Dept.*

**\*Marchette, Nyven John**

(1928, Murphys, California, U.S.A.; x) was educated in zoology at the University of California (A.B. 1950, M.A. 1953) and took his Ph.D. in Bacteriology at the University of Utah in 1960. Assistant Research Microbiologist, Hooper Foundation, University of California Medical Center, San Francisco (Cal.) from 1961 onwards. In 1962–64 associated with the Institute for Medical Research Kuala Lumpur, working on the ecology of rickettsial diseases in Malaya; from 1965–67 associated with the Dept of Bacteriology, Fac. of Medicine, Univ. of Malaya, Kuala Lumpur, for the investigation of the ecology of arthropod-borne viruses of Malaya. On two occasions in 1963 the Institute for Medical Research sponsored expeditions which spent a total of about 3 weeks on G. Jerai in Kedah (*Malay Peninsula*), viz. in March and September.

COLLECTING LOCALITIES. *Malaya*. 1963. G. Jerai (Aug.–Sept.),<sup>1</sup> *Pulau Aur*.<sup>2</sup>—1964. Taman Negara.

COLLECTIONS. The specimens were not collected with any herbarium, some are still in the Faculty of Medicine at Kuala Lumpur.

LITERATURE. (1) N. J. MARCHETTE: 'Notes on the flora of Gunong Jerai (Kedah Peak)' (*Mal. Nat. J.* 19, 1965, p. 129–137; with History of Exploration and List of species collected).

F. L. DUNN: 'Notes on the ferns of Gunong Jerai' (*Mal. Nat. J.* 20, 1967, p. 131–138).

(2) N. J. MARCHETTE: 'Notes on some Flowering Plants of Pulau Aur' (*Mal. Nat. J.* 18, 1964, p. 50–59; annotated list of records).

**\*Martin, Adam Menzies**

(1940, Lanark, Scotland; x), Foreman, Royal Botanic Garden, Edinburgh, accompanied B. L. BURTT (see there) on a trip to *Sarawak* in 1967. He was mainly in charge of the collecting of living *Gesneriaceae* and *Zingiberaceae*.

COLLECTIONS. *Herb. Edinb.*

**\*Martin, Ricarte, see Philippine National Herbarium.****\*Mason, L. Maurcie**

(1912, Fincham, King's Lynn, England; x), farmer and amateur gardener, who made extensive travels for the collecting of living plants, mostly orchids, in the tropics.<sup>1</sup>

COLLECTING LOCALITIES. 1952. *Malaya*.—1954. *NE. New Guinea* (Mand. Territory): at Lae,

Nondugl, and Mt Hagen.—1958. *Central Malaya*: mostly around Kedah Peak; in spring *N. Borneo*: Segama, Mt Silon, Darvel Bay, Lahad Datu; *Sarawak*: Kuching area.

COLLECTIONS. Living plants only, of which specimens have been offered to Kew Gardens, mostly orchids and *Begonias*. Occasionally material is preserved in spirits; *Herb. Kew*.

LITERATURE. (1) L. M. MASON: 'The Travels of a Plant collector' (*J. R. Hort. Soc.* 94, 1969, p. 481–489).

**Matie, Miss**

Instructor of Botany in Manila. Possibly identical with the collector OENY MATI (see Suppl. Cycl. Fl. Mal. I, 5, 1958).

**Matthew, Charles Geekie**

COLLECTIONS. At the end add: *Herb. Edinb.*

**\*Mayer**

Unknown collector of that name. MS list of plants from Surinam and *Amboina* in *Oxford Univ.* (in MS 174).

**Mayr, Ernst (Walter)**

Add: In 1953 besides appointed Alex. Agassiz Professor of Zoology in the Museum of Comparative Zoology, Harvard University.

LITERATURE. (1) Add: For annotations on his itinerary in the Arfak Mts see W. VINK in *Nova Guinea*, Bot. 22, 1965, p. 487, fig. 5.

BIOGRAPHICAL DATA. In H. M. WHITTELL: 'The Literature of Austral. Birds' 1954, pt 2, p. 511–513.

**Mearns, Edgar Alexander**

COLLECTING LOCALITIES. Add: *Sulu Archipelago*: *Dammi I.* (Jan. 4, 1906), *Tawitawi I.*, *Tataan I.* (Jan. 8, 1906).

M.E.D.P., see M. E. D. POORE; not to be used in citing.

**\*Meer, Jikke Henriëtte Hermina van der**

(1893, Amsterdam, Netherlands; x), phytopathologist, who studied and took her Ph.D. (1925) with honours in the University of Amsterdam. From 1919–32 she was on the staff of the Phytopathological Institute of the Agricultural College at Wageningen. As a fellow of the International Education board she made a study tour to the Dutch East Indies from Nov. 1927–Jan. 1929, till August 1928 stationed at the Deli Experiment Station at Medan. From 1932–36 on half-pay; in 1936 married to Dr Ir J. H. J. VAN DE LAAR. At present living at Spaubeek (L.), Netherlands.

COLLECTING LOCALITIES. Nov. 1927–July 1929 in *Sumatra East Coast*: garden Deli Experiment Station; at Brastagi; Aug.–Sept. 1928 in *Java*, where she visited all experiment stations, collecting on G. Gedeh-Pangrango, etc.

COLLECTIONS. 162 nos of material for phytopathological study in *Herb. Wageningen*, collected for educational purposes of students of tropical agriculture. Also material from *Java* preserved in formalin.



**Meer, Pieter van der**

COLLECTIONS. Add: Occasionally he presented specimens to *Herb. Leyden*.

**Meer Mohr, Johannes Carolus van der**  
(d. 1969, Barchem, G., Netherlands).

**\*Megata, Moritane**

(1917, Kyoto, Japan; 1945, Leyte I., Philippines) graduated in horticulture, Faculty of Agriculture, Kyoto University, 1942. He served as a lieutenant during World War II. His main interest was *Cactaceae*.

COLLECTIONS. He collected some plants in *Java*, *Celebes* (Manado), and at ? Tjimoelon in 1940. In *Herb. Kyoto Fac. Sci.* living plants from *Java* too.

**Mendoza, Demetrio R.**

Add: he is engaged in the preparation of a Flora of Banaue (N. Luzon) with R. M. DEL ROSARIO, with whom he also wrote 'Philippine aquatic flowering plants and ferns' (Manila 1967).

In 1969 he retired as Curator of the Philippine Herbarium. He is now connected with the faculty of the Dept of Forestry, Araneta University.

COLLECTING LOCALITIES. Add: 1961. *Luzon*: since June 1 in cutting and logging areas of the Nasipit Lumber Co. in Agusan Prov., and on the mountains in Agusan.—1964. *Palawan* (Apr.–June).—1965. *Quezon Prov., Luzon* (June 1–28).—1967. *Luzon*: Dalton Pass in Nueva Vizcaya Prov. (Mar. 3–18); Banaue,<sup>1</sup> Ifugao Prov. (May 11–June 11) with R. M. DEL ROSARIO.

COLLECTIONS. Add: *Herb. Kew*.

LITERATURE. (1) *Cf. Fl. Mal. Bull. no 22*, 1968, p. 1538–1539.

BIOGRAPHICAL DATA. Portr. in *Philip. Orch. Rev.* 7, 1959, p. 35.

**\*Menor, V., see Philippine National Herbarium.**

**Menzies, Archibald**

COLLECTIONS. See this Supplement under D. NELSON. Herbarium specimens often signed 'A.M.' on the back of small sheets.

LITERATURE. (2) Add: For itinerary in Alaska see *Bot. Not.* 1940, p. 297.

BIOGRAPHICAL DATA. Last line (Suppl. *Cycl. Fl. Mal.* I, 5, 1958) add: and in *Occ. Pap. Calif. Ac. Sc. no 20*, 1943, facing p. 15; *Trans. R. Soc. New Zeal.* 88, 1960, p. 63–64.

**Merrill, Elmer Drew**

Rightly: d. at Forest Hills.

COLLECTING LOCALITIES. Add: The locality 'Separacion' or 'Separation Point', not found on atlases, is situated in *E. Palawan* at about one third of its length (from the south); it is a small cape in Island Bay.

BIOGRAPHICAL DATA. Add: *J. Wash. Ac. Sc.* 46, 1956, p. 267–268; *Philip. J. Sc.* 85, 1956, p. 181–188, portr.; *Taxon* 6, 1957, p. 89–101, portr.; *Biogr. Mem. Nat. Ac. Sc. U.S.* 32, 1958, p. 273–333, portr., chronol. bibliogr.; Dedication in *Fl. Mal.* I, 6, 1972, p. (7)–(16), portr.

**Merritt, Melvin Leroy**

COLLECTIONS. Add: *Philippine* dupl., coll. with H. M. CURRAN, in *Herb. Edinb.*

**Mertens, Karl Heinrich**

LITERATURE. (1) Add: For Alaska see *Bot. Not.* 1940, p. 299.

**\*Merton, (L.) F. (H.)**

collected at Gua Batu, Selangor (Dec. 22, 1960), in Pahang, *Malaya*, with CHEW WEE LEK, 1962, and with POORE.

**Metselaar**

His plants from *E. Java* were collected about 1915.

**\*Metzner, Joachim K. M.**

(1940, Berlin, Germany; x) took his 'Diplom Volkswirt' (economist) at Heidelberg University, Südasien Institut (1966), and subsequently read at Cornell University (1967/68). He spent 15 months in 1969–70 in *Portuguese Timor* to study the ethnography and vegetation, collecting voucher specimens. He worked in the Baucau-Viqueque area. A Ph.D. thesis is forthcoming.

COLLECTIONS. *Herb. Leyden*: 270 nos; private dupl. collection.

**Meyer, Adolf Bernhard**

ITINERARY. Add: 1871–72. *Philippines*.<sup>4a</sup>

LITERATURE. (4a) 'On the Population' *cf. MEYER* in *Peterm. Geogr. Mitt.* 20, 1874, p. 17–19, tpls; and *l.c.* p. 19–22.

**Meyer, Robert**

cannot possibly have been born in 1891; in ? 1881.

**Meijer, Willem**

Add to Suppl. *Cycl. Fl. Mal.* I, 5, 1958: From May 1959 in the employ of the Forest Dept North Borneo, stationed at Sandakan. In 1962/63 he made a round-the-world trip, visiting herbaria; in 1966 with European leave again. In 1968 appointed Visiting Associate (later Associate) Professor in the University of Kentucky, Lexington, U.S.A.

Author of a botanical guide to Mt Kinabalu (Sandakan 1963, mimeogr.), papers on *Dipterocarpaceae*, etc. His investigations in Sumatra resulted in some other papers.<sup>14</sup>

COLLECTING LOCALITIES. Add: 1959. From May 20 in *N. Borneo (Sabah)*:<sup>15</sup> regions of Tawau (end of June–end of July), Sepilok F. R., W. coast regions (Padas Gorge and surroundings of Kinabalu); lower slopes of Kinabalu near Ranau and above Bundu Tahan and Tenompok (Oct. 27–Nov. 9); Darvel Bay near Lahad Datu (Nov. 15–19).—1960–61. Several times in the Kinabalu area,<sup>16</sup> and short trip to *Sarawak and Brunei* (1961).—1962. Early in the year (Feb.) a 3-weeks tour on Mt Kinabalu with Prof. E. ABBE, R. KAUL, and Mr & Mrs BOGLE of Minnesota (see those). *Malaya*: E. Johore to Kuala Trengganu (May 27–June 5), with K. M. KOCHUMMEN. *N. Borneo*: Mt Andrassy and near Quoin Hill, Tawau; Mt Trusmadi in Beaufort Distr.—1963. Mt Kinabalu and Mesilau R. (July) with SLEUMER a.o.; in various other places in Sabah.—1964. In Jan. accompanying H. E. MOORE in Sabah.—1966. *Labuan*.

**COLLECTIONS.** Add: The *Borneo* plants numbered in the SAN series; those from *Malaya* in the KEP series; also dupl. in *Herb. Edinb.*

**LITERATURE.** (7) Add: 'Rottans van Nunukan' (Pengg. Alam 36, 1957, p. 51-64, 5 fig.).

(10) Add: W. MEIJER: 'On the Flora of Mount Sago near Pajakumbuh, Central Sumatra' (Pengg. Alam 38, 1959, p. 2-11, fig. 1-3; *ibid.* 40, 1961, p. 3-13, 3 fig.).



MRS. A. N. MILLAR

(14) W. MEIJER: 'Notes on the Ecology of Sawah Plants in the region of Pajakumbuh' (Res. Pamphl. no 2 Bot. Dept Fac. Agr. Pajakumbuh 1957, mimeogr., 7 pp. folio); 'Some Notes on the Flora of the Taram-Harau Region etc.' (*ibid.* no 3, 1958, mimeogr. 5 pp. folio).

(15) W. MEIJER: 'Notes on the Flora of Sepilok Forest Reserve 15 miles N of Sandakan' (Forest Dept, Sandakan 1960, 12 + 19 pp. folio, stencilled).

(16) W. MEIJER: 'Plant life in Kinabalu National Park' (Mal. Nat. J. 24, 1971, p. 184-189, pl. 61-62).

**Meijer's collectors, W.**

in *Sabah*; a.o. KAPIS BIN SISIRON and KILANG.

\*Michael Anak, see Forest Dept North Borneo.

**Micholitz, W.**

Collecting in *Borneo* (see Cycl. Fl. Mal. I, 1, 1950) took place in 1903-04.

\*Miki, Dr Shigeru

(1901, Kagawa Pref., Japan; x) graduated at Dept Bot. Fac. Science, Kyoto University, 1925. For a long time Professor of Botany (palaeobotany) of Osaka City University, later of Mukogawa Women's College.

**COLLECTING LOCALITIES.** During World War II in *New Guinea* (Manokwari, Momi, etc., 1943), and in *Borneo* (Danau Saloh, Feb. 1945).

**COLLECTIONS.** About 2000 specimens from *New Guinea* in *Kyoto Herb. Fac. Science* (specimens inserted in the general herbarium by family); at least partly also in *Herb. Bog.* (> 10 nos).

**BIOGRAPHICAL DATA.** Portr. in HATUSIMA, Flora Ryukyus 1971, p. 63.

\*Mikil, G., see Forest Dept North Borneo.

**Militante, Miss P. J.**

geologist, Ph.D. from Stanford (Cal.).

\*Millar, Andrée Norma (née Manners-Sinclair)

(1916, Paris, France; x) studied arts at Woodford House, Sussex, and then Auckland University and came with her husband, JOHN WILLIAM MILLAR (1912, Sydney, N.S.W.; 1966, Lac, Terr. of New Guinea), a marine engineer, to the gold fields of Bulolo, Morobe District, New Guinea, in 1947. Life in the Highlands drew their attention to plant collecting as a hobby, starting with living ferns, then orchids, and finally other plants as well. In the meantime she taught in the European school at Bulolo, and through the interest of the Forestry Office there they began collecting both live and herbarium specimens for Lac. In 1956 she joined the staff of the Lac Botanic Gardens, combining horticultural with field work, starting as Technical Assistant and leaving the Gardens in January 1971 as Curator. At that time she became Curator of the Gardens of the University of Papua and New Guinea, Port Moresby. She hopes to create a purely native botanic garden.

Author of orchid and garden articles for various overseas magazines, and of a gardening book.

**COLLECTING LOCALITIES.** *Territory of New Guinea.* 1949-53. Bulolo and surroundings, mostly living ferns and orchids. 1954. Accompanying WOMERSLEY in Jimi Valley, W. Highlands.—1955. Joining the Forestry Botanic Party following the old Muboi trail from Wau, through the Range and down to Skin Diwai.—1961. With D. H. NICOLSON (see there).—1962-64. With C. D. SAYERS.—1963. With P. VAN ROYEN etc. (see there). Between 1956-71 she accompanied field work and was 3 times in Mt Wilhelm area, twice on Mt Kerigomna, on *Kar Kar I.*, *Long I.*, and in the Gogol Valley. Besides collecting extensively from Lac in the Morobe Distr. to the W. Highlands, on the Kokoda Trail, and by boat to islands in the Huon Gulf. Field botanist on a trip by the Dept of Agriculture in *Papua*, following D'ALBERTIS' route from Daru to Kiunga, travelling up the Fly, Strickland, and Herbert Rivers and on Lake Murray en route. Leading a party down the Sepik River from the Yellow R. and through the Murik Lakes and up the coast again to Aitape, collecting at all islands on the way. Further in *Bougainville (Solomon Is.)*, *New Ireland* and on the W. coast of *New Britain (Bismarck Archipelago)*.—1971—. *Papua*. Undertaking extensive collecting in the Central District.

**COLLECTIONS.** *Herb. Lac*, partly together with her husband and others, numbered in the NGF series until October 1970. Later collections in *Herb. Univ. Papua New Guinea*, starting with no UPNG 1001.

**Mitchell, A. S.**

(d. 3 Oct. 1959, Singapore).

BIOGRAPHICAL DATA. Mal. For. 22, 1959, p. 259.

\***Mitchell** Brian Anderson

(1930, England; x) graduated B.Sc. in Forestry with 2A Hons in Botany; 1952–53 Military Service; in 1954 one year post graduate scholarship with British Nature Conservancy; 1954–65 Silvicultural Ecologist with the Malayan Forest Service, Kepong. From 1965 Forestry Officer with the Commonwealth Forest Research Institute, in charge of the Southern Regional Station at Mt Gambier, South Australia, engaged on pine nutrition research.

COLLECTING LOCALITIES. 1964–65. *Malay Peninsula*.—1968. *Christmas Island* (Ind. Ocean), from June–Aug. general over the whole island.

COLLECTIONS. In *Kepong Herb.*: small collection from the *Malay Peninsula*, and 52 numbers from *Christmas I.*; a dupl. set from *Christmas I.* will be sent to *Leyden*.

**Mochtar bin Musa**

(see Suppl. Cycl. Fl. Mal. I, 5, 1958) is identical with Mantri MUCHTAR of Herbarium Bogor. He is recorded by KOSTERMANS (*in litt.*) to have collected 60 field numbers in *Komodo (Lesser Sunda Is.)* in Oct.–Nov. 1961. He accompanied W. J. J. O. DE WILDE and Mrs B. DE WILDE on their expedition to the Leuser complex, in 1972. In S. Lampongs (S. Sumatra) he collected 115 *nos* (Jan.–Feb. 1972).

\***Moll**, Victor Wilhelm

(1930, Salatiga, Java, Indonesia; x) was educated at the Forestry School at Buitenzorg. From 1953–58 Assistant on a rubber plantation in Sumatra (East Coast). In the latter year he went to Holland, and from May 1959–1963 'Bosarchitect' in the Forestry Service in Dutch New Guinea.

COLLECTING LOCALITIES. *W. New Guinea*. 1959. *Biak I.* (Siabes), Kebar Valley (Andjai) (Sept. 4–11), *Biak I.* (Mansforbo, Son, Parieri, Soendei) (Nov. 6–Dec. 1).—1960. Oransbari (Feb. 10); Oemboei, near Andai, Manokwari (May 11–19); with W. VINK (see there) to the *Terr. of Papua & New Guinea* (June–July); Oransbari (Nov. 18).—1961. *P. Adi* (Feb. 24–Apr. 9); Warsamson Valley, E of Sorong (July 16–Aug. 24); Kebar Valley (Aifat R.) (Nov. 21–Dec. 11).—1962. Babo Distr., Sjuga-Wagura area (Armina, Kwafa) (Apr. 19–May 20); *Supiori I.*—From 1959–63 in the surroundings of Manokwari.

COLLECTIONS. *Herb. Manokwari*: about 1100 *nos*; dupl. at *Leyden*; numbered in the BW series.

\***Momot**, see Boswezen Nieuw Guinea.

**Moore**, Chas.

(see Cycl. Fl. Mal. I, 1, 1950) collected also *Cyperaceae* in *Duke of York I.*

\***Moore**, Jr, Harold Emery

(1917, Winthrop, Mass., U.S.A.; x) was educated in Massachusetts (B.S. 1939), Harvard (M.A. 1940; Ph.D. biol. 1942). From 1947–48 Technical Assistant Asa Gray Herbarium (Harvard), 1948–51 Assistant Professor of Botany Bailey Hortorium.

Cornell, subsequently Associate Professor (1951–60) and Professor and Director of the Bailey Hortorium, N.Y. He collected palms on a world tour in 1963–64.

COLLECTING LOCALITIES. 1963. *Malaya* (early Dec.–29th): *Singapore* and Bukit Timah F. R., Johore and Mersing F. R., a Forest Reserve on the road to Kluang (17 miles from Jemaluang), Kuala Lumpur, G. Takun; departure for Borneo (30), *Sarawak*, tour on Mt Matang (31).—1964. Vicinity of Kuching, several times to Mt Matang, 4-day trip to Baku National Park (Jan. 2–6), limestone hills near Bau (Jan. 8), Bintulu (9–10), Nyabau (11); overnight stop at Brunei and proceeding to *Sabah (N. Borneo)* (Jan. 14–26, with Dr W. MEIJER): Kebon China, Mt Walker, Sepilok F. R. (15), Uchung Tanjong trail (16), Sandakan, Jesselton (19), Kimanis F. R., Beaufort Hill (20), Tenom, stop at Rayoh, slopes above Sg. Masanoi, slopes of Bt Tenom (in Crocker Ridge Reserve), N. end of Sabah (25), Kota Belud, Maruda Bay, Jesselton.—*Terr. of New Guinea*: Lae (arriving Mar. 1), road to Bulolo and Wau, road to Goroka, Bupu Village (2500 ft) (3–4), vicinity of Lae, Bulolo (10), Bulolo-Watut Divide (11), Wau (12–13), by plane to Wagau (14), Lae proceeding to the Solomon Is. and New Caledonia, Fiji, etc.

COLLECTIONS. In *Herb. Bailey Hort.*: 75 *nos* *Sarawak*, 72 from *Sabah*.<sup>2</sup> Duplicates will be distributed.

LITERATURE. (1) H. E. MOORE Jr: 'Palm hunting around the World. II. Malaya and Sarawak' (Principes 9, 1965, p. 103–117, fig. 89–107); *ibid.* III. 'Sabah and Australia' (*l.c.* p. 138–152, fig. 125–148); *ibid.* V. 'New Guinea to the New Hebrides' (*ibid.* 10, 1966, p. 64–85, fig. 1–29); 'New Palms from the Pacific' (*l.c.* p. 85–99, fig. 1–7; incl. a *Cyrtostachys* from Papua).

(2) H. E. MOORE Jr & W. MEIJER: 'A new species of *Arenga* from Borneo' (Principes 9, 1965, p. 100–103, fig. 86–88).

BIOGRAPHICAL DATA. *Americ. Men of Sc.* 10th ed. 1961, p. 2842.

**Moraux-Baas Becking**, Louise Hermine

Rightly: (b. Brummen, Netherlands; 1969, Renkum, Gld., Netherlands).

\***Morgan**, Tom R.

A soils officer of the Papua and New Guinea Department of Agriculture. In 1968 living at Surrey Hills, Vict., Australia.

He made a few collections in *E. New Guinea*, mainly herbaceous plants, in the 1950s; in *Herb. Lae*.

\***Morley**, R. J.

Research Assistant at the Geography Department, University of Hull, England, accompanied J. R. FLENLEY on a tour to W. Java and Sumatra in 1972.

COLLECTING LOCALITIES. 1972. *Sumatra* and *W. Java* (see under FLENLEY). After FLENLEY's departure he continued to Malaysia, and visited Tasek Bera in *Malaya*, and Mt Kinabalu in *Sabah* (N. Borneo). He returned to Britain on Nov. 4.

COLLECTIONS. With FLENLEY (see there) and M. K. KARDIN, and alone *nos* 1–48 (*Sabah*), and

49-98 (*Malaya*). In *Herb. Hull Univ., etc.* (see FLENLEY).

\***Morris**, (Sir) W.

COLLECTIONS. *Singapore* plants in *Herb. Edinb.* (purch. 1895 with *Herb. F. HENDERSON*).

**Mortensen**, Ole Theodor Jensen

BIOGRAPHICAL DATA. Add: *Dansk Bot. Ark.* 21, 1963, p. 68.

\***Mortier**, C. M., see *Boswezen Nieuw Guinea*.

**Moszkowski**, Max

COLLECTIONS. Add: *New Guinea* dupl. (1910) in *Herb. Edinb.*

**Moulton**, John Coney

COLLECTIONS. Add: Plants from Kinabalu, *N. Borneo* (1913), and from *Sarawak* in *Herb. Edinb.*

**Mousset**, J. P.

COLLECTIONS. Add: *Java* plants (1906) in *Herb. Edinb.*

**Moysey**, Louis (or Lewis)

COLLECTIONS. Add: Plants *Mal. Peninsula* (1937) with KIAH BIN SALLEH also in *Herb. Edinb.*

**M.S.**, see MOH. SHAH

Specimens preferably to be cited with his full-name.

\***Muas**, A., see *Forest Dept Sarawak*.

\***Muchtar**, see MOCHTAR BIN MUSA.

\***Muin bin Chai**, see *Forest Dept North Borneo*.

\***Mujin**, M. A., see *Forest Dept North Borneo*.

\***Muller**, Jan

(1921, Rotterdam, Netherlands; x) was educated at the College for Tropical Agriculture, Deventer, Netherlands; from 1946-67 Palynologist of the Royal Dutch Shell in Venezuela and Borneo; from 1967 Palynologist at the Rijksherbarium, Leyden.

COLLECTING LOCALITIES. *Malaysia*. 1962-64. In *Brunei*, *P. Labuan* and *P. Mullankassan*, estuaries of Brunei and Tutong rivers.

COLLECTIONS. Specimens from 22 marked trees, nos 1-22, in *Herb. Leyden*. Mangrove plants.<sup>1</sup>

LITERATURE. (1) J. MULLER & S. Y. HOU-LIU: 'Hybrids and Chromosomes in the genus *Sonneratia* (Sonneratiaceae)' (*Blumea* 14, 1966, p. 337-343).

**Mundo**, A. del

Add: Assistant Professor of Botany, Agricultural College, Central Luzon.

\***Murata**, G.

accompanied a Japanese expedition to Sumatra (Aug. 4-Sept. 20, 1971); other members: Prof. M. HIRANO (algologist), Dr K. IWATSUKI (bryologist). Dr J. DRANSFIELD (see there) from Bogor joined the expedition.

As he is the author of papers on phanerogams,

it was probably he who was responsible for the collecting of higher plants.

ITINERARY. 1971. *N. Sumatra*: Sibolangit (Aug. 11-12) and Toba Lake, Sikundur Nature Reserve near Tandjungpura (13-15), Gajolands (18-29), climbing a.o. G. Kemiri; Takengon area (early Sept.).

COLLECTIONS. *Herb. Kyoto*?

\***Murdoch**

probably a collector of H. N. RIDLEY. He collected in Selangor in 1908; in *Herb. Sing.*

\***Narciso Jr**, P., see Philippine National Herbarium

**Nedi**

COLLECTING LOCALITIES. Add: 1967. Apr. 10 with SOEGENG to *New Guinea (Irian)* to take part in the border expedition with Australian New Guinea.

**Née**, Luis

LITERATURE. (1) Add: For itinerary in Alaska *cf. Bot. Not.* 1940, p. 297.

BIOGRAPHICAL DATA. Add: In HEMSLEY & HOOKER, *Biol. Centr.-Amer.* 4, 1887, p. 119.

**N.E.G.C.**, see CRUTTWELL, N. E. G.

preferably to be cited with his full name.

**Nelson**, David

COLLECTIONS. Add: According to Dr NEWCOMBE his botanical specimens of COOK's last voyage seem to have become mixed with those of MENZIES (*cf. Arch. Brit. Columbia, Mem. no* 4, 1923; *n.v.*).

LITERATURE. (1) Add: For itinerary in Alaska *cf. Bot. Not.* 1940, p. 296.

\***Neubauer**, Johann (Hans) Franz

(1911, Vienna, Austria; x), biologist, educated at Vienna University (Ph.D. 1934); from 1948-51 Expert Advisor to the Ministry of Agriculture, Kabul Afghanistan, and teacher at the Faculty of Science; from 1952-62 Professor of Botany, University of Indonesia, Bandung; in 1962-63 in East Pakistan, and from 1963-65 in the Faculty of Science at Kabul University once more. From May 1965 teacher and custodian in the Faculty of Science at Giessen University.

Author of numerous papers on general biology, morphology, pharmacognosy.

COLLECTING LOCALITIES. Between 1952-62. *S. Sumatra*: from Kroë via Martapura to Tandjong Karang (Aug. 1954), beach at Ulu. *Java*: *Nusa Kambangan* (Apr. 13, 1955), Dago, Batavia, Kuningan, Tjiater near Bandung, Pasir Djati (Jan. 24-28, 1961), Tjisolok (Wijnkoopsbaai), Kadipaten, Bromo, Idjen, Diëng, Pasir Putih (E of Pasuruan) on the beach. *Bali* (1959 and 1961): Lake Batur and Bratan.

COLLECTIONS. His Afghan collection is put at the disposal of Prof. RECHINGER at Vienna. Indonesian collections mainly in *Herb. Bandung Univ.*, but also in *Bot. Lab. Padjadjaran Univ. Bandung*, and less in *Herb. Bog.*; some dupl. in *Herb. Leyden* (rec. Mar. 1966).

The numbers are mostly those by which the specimens are kept in Bandung herbaria. In cases

where those numbers got lost on transportation to Europe, the plants were numbered above 5000, as the Afghanistan collection amounted to near 5000.

BIOGRAPHICAL DATA. Who is who in Austria.

**New Guinea Forests (formerly Forces)**

Add: MICHAEL GALORE\*, A. E. H. ROSS\*, R. RIDGWELL\*, etc. After no 50,000 the series letters were changed into LAE.

COLLECTIONS. Add: Also dupl. in *Herb. Edinb.*



FRANCIS S. P. NG

**\*Newell, Thomas Kenneth**

(1939, New York City, U.S.A.; x) graduated from the New York State Agricultural and Technical Institute (1962), B.Sc. from California State Polytechnic College in Ornamental Horticulture (1964), and subsequently a graduate student at the University of Hawaii, majoring in plant taxonomy.

He was working on a thesis on the genus *Joinvillea*, and made a trip to the Malesian region to collect material and to make observations on pollination, dissemination, and ecology of that genus.

COLLECTING LOCALITIES. 1966. *Malesia. Sabah*: Sandakan (Aug. 5), Jesselton (9), vicinity of Sabah National Park and along the road between the Park and the town of Tamparuli (11–16); *Singapore* (20); *Songkla* in Thailand (28); *Malay Peninsula*: G. Hijau (Taiping) (31), G. Brinchang (Cameron Highlands) (Sept. 2–4), Fraser's Hill (7); *Pacific*: Solomon Is., Fiji, Samoa.

COLLECTIONS. Mainly *Joinvillea*,<sup>1</sup> but also a

few *Flagellaria* and *Hanguana*; nos 141–175 (176–255 from Pacific islands). In *Herb. B. P. Bish. Mus.*; dupl. will be sent to *Sandakan, Paris, Leyden, Florence, and Kew.*

LITERATURE. (1) TH. K. NEWELL: 'A Study of the Genus *Joinvillea*' (*J. Arn. Arbor.* 50, 1969, p. 527–555, 6 fig., 1 tab.).

**\*Newton, Ken. G.**

An Agricultural Officer in *Australian New Guinea*; in 1968 stationed at Samarai, Papua. He collected a few specimens in the Sepik District in 1957; in *Herb. Lae.*

**\*Ng, Francis S. P.**

(1940, Kuala Lumpur, Malaysia; x) graduated 1964 B.Sc. (Hons) in Botany at the University of Tasmania; joined the Forest Research Institute, Kepong, as Forest Botanist in June 1964. He is writing chapters for a Tree Flora of Malaya, and makes expeditions to various parts of Malaya to collect material. He went on a Colombo Plan Scholarship to Oxford University for three years from October 1968; D.Sc. 1971. At present Forest Botanist at Kepong, and co-author of the Tree Flora of Malaya.<sup>1</sup>

COLLECTING LOCALITIES. *Malay Peninsula*: in various parts. In 1966 a.o. in Johore, *Penang*, Selangor, Malacca, Perak (Tapah Hills, Gopeng, Slim R., Pahang (G. Tahan); in 1967 in Negri Sembilan, Johore (Mersing), Ulu Kelantan, Lower Perak, Sg. Chior and Siput in Perak; in 1968 in the Cameron Highlands and Perak (Kledang Saiong, and Bubu F. R.).

COLLECTIONS. *Herb. FRI Kepong*; dupl. at *Kew, Leyden, Sing., Arn. Arbor., Sandakan, Kuching*. Medio 1968 about 2200 nos. In the FRI series and 100 early collections in KEP series.

LITERATURE. (1) Author of 'A Guide to the Arboreta at Kepong and Changlun' (*Mal. For.* 28, 1965, p. 289–306, map); 'In search of *Combretocarpus*' (*l.c.* 29, 1966, p. 32–33); '*Allantosperrum* in Bubu Forest Reserve' (*l.c.* 31, 1968, p. 165–169).

**Ngadiman bin Ha(d)ji Ismail**

(d. Sept. 1958).

BIOGRAPHICAL DATA. *Gard. Bull. Sing.* 17, 1959, p. 337–338, portr.

NGF nos, see New Guinea Forests.

**Nicholson, Donald Ian**

Add: He retired from the Sandakan Herbarium in 1965; subsequently he joined the Forest Department in North Queensland, at Cairns, Australia.

**\*Nicolas**

1st lieutenant, accompanied the 'Star Mountains Expedition' to *Central New Guinea* in 1959 (see under C. KALKMAN, in whose series some plants have been collected). He took part in the trip to Mt Antares.

**\*Nicolson, Dan H.**

(1933, Kansas City, Mo., U.S.A.; x), botanist, educated at Grinnell College (Iowa; A.B. 1955), Stanford University (M.B.A. 1957), and Cornell University (N.Y.; M.Sc. 1959); Teaching Assistant at Cornell, 1959–1960. His main interest is

*Araceae* on which he planned to write his thesis. For the study of this family he made a trip to Malesia in 1960-61 and subsequently visited several European herbaria. Ph.D. 1964 Cornell University, and subsequently on the staff of the Smithsonian Institute.

COLLECTING LOCALITIES. *Philippines*, staying at the College of Agriculture, Laguna, Sept. 1960-Jan. 1961. *Luzon*: to summit Mt Makiling (Sept. 18, 1960); *Mindanao* (22-29): Davao,



D. H. NICOLSON

Maparat, Compostella, Mampising, Apocon School, base Mt Apo to 1200 m (25), Agusan, Esperanza, Sibagat, Sianib (29); *Camiguin I.* (Oct. 2); *Mindanao* (2-5): Misamis Or., Binoni to Mambajao, Bukidnon, Musuan, Lake Apo; *Luzon*: Coll. Agric. (8), Molawin Creek (20), Sorsogon and Bulusan National Park (24-27), Mt Mayon to 700 m (28); *Catanduanes*, center of island (29); *Luzon*: Laguna, Coll. of Forestry (26), Quezon National Park (27); *Samar*: Bagacay Barrio (Dec. 1); *Leyte*: Putok River (3); *Negros Oriental*: Mt Canlaon to 1000 m (6); *Luzon*: Laguna, Coll. of Agr. (14-17), to summit Mt Makiling (18); Coll. of Forestry (Jan. 8, 1961).—*Java*: stay at Kebun Raya Indonesia, Bogor (Jan.-May 1961): Tjiseeng (Jan. 28), Hort. Bog. (Feb. 2), Djasinga (7), Tjampea (16), G. Gedeh (between 1700 and 2700 m, 17-18), Hort. Bog. (24-26), Tjibodas (Garden and along way to Tjib(e)ur(e)um, 1400-1600 m) (Mar. 2-3), Hort. Bog. (Mar. 14-Apr. 1), Pelabuhan Ratu (2), Hort. Bog. (3-23), Palabuhan Ratu (24), Hort. Bog. (25-May 10); *Singapore I.*: Hort. Sing. (to June 14); *Malaya*: Klang Gates Reservoir, Selangor (17); Bot. Gard. *Penang* (19-21); Perak: Taiping and vicinity (22-25); *Singapore I.*: Hill, Bt Timah, etc. (July 4-15); Selangor: Klang Gates (16), Gunung Simpang F. R. (17), Batu Cave Ravine and Telok F. R., Klang (18), to Fraser's Hill (19); Cameron

Highlands in Pahang (20-23), summit G. Brinchang (21), G. Beremban (22), G. Jasar (23); Johore (28); *Singapore*: Bot. Gard. (Aug. 1-2). *NW. Borneo, Sarawak*: Semengkok F. R. (3), Matang F. R. (5), Bau (5, coll. EDWARD TAYLOR, 1 no; 6), Bako National Park (7-8), Setapok F. R. (9); *Singapore I.*: Bt Timah etc. (13). By way of Australia (coll. a few numbers) to *Terr. of New Guinea*: Morobe Distr., N of Lae (Sept. 21); Western Highland Distr. (26, partly coll. with MILLAR), Lae Bot. Gard. (30-Oct. 1, 10-11), Lake Wanum (W of Lae, Oct. 1, in NGF series), Bumbu River (8); *Papua*: Centr. Distr., Brown River F. R. (12), Sogeri Plateau (13), headwaters Kemp Welch R. (14), Sogeri Rubber Estate; *Terr. of New Guinea*: Malambe track up Bussu R. (17), Lae Bot. Gard. and Patep Creek (20), Edie Creek Road and near Wau (21), Bulolo (23, 25), Oomsia Creek (25), Bot. Gard. Lae (26), Markham R. (26); *New Britain*: Rabaul and Kerevat (28-29); *Bougainville* (30-Nov. 2): Arawa Plantation (30-31, Nov. 1), Kupei (Nov. 1); *Terr. of New Guinea*: Morobe Distr. (5); *New Britain* (9), road to airport (9-10); *Terr. of New Guinea*: Morobe Distr., Lae Bot. Gard. (12), Madang (17), Wewak (17); *Dutch New Guinea*: Lake Sentani (17), Biak I. (17), Manokwari and Faninda (18), Manggoapi (19), Tafelberg F. R. (20), Agric. Station (21), Maripi (21), Maroemi (22), Biak (24).

COLLECTIONS. Dupl. from *Malesia* in *Herb. Leyden*.

\*Niel, Joannes Petrus van

(1930, The Hague, Netherlands; x) was educated at the Rijkstuinbouwschool Boskoop (tropical section; 1947-50); rubber planter in E. Sumatra (1951-56), and Australian New Guinea (1957-60). From 1960 onwards Assistant Palynologist, later Palynologist in the employ of the B.I.P.M. (Oil Cy) respectively at The Hague, in Argentina, from 1964-1971 at Seria (Brunei), at present living in England.

COLLECTING LOCALITIES. Mostly in *Brunei*, NW. Borneo, 1964 onwards.

COLLECTIONS. *Herb. Leyden*: nos 3377-4415 (in July 1969); no dupl. From 1951-60 he collected molluscs for the Amsterdam Zoological Museum. He makes pollen slides, of which dupl. sets are at Pondichéry (Inst. Français), India, and Herb. Bog.

Nielsen, Einer Steemann

(under STEEMANN NIELSEN in Cycl. & Suppl. Cycl. Fl. Mal. I, 1 & 5) also joined the Danish 'Deep-sea Galathea Expedition', 1950-52.

In 1944 appointed Professor of Botany in the Pharmaceutical College in Copenhagen; since 1962 Lecturer in Oceanography at the University.

BIOGRAPHICAL DATA. Dansk Bot. Ark. 21, 1963, p. 42, w. portr.; in A. HANSEN, Den Danske bot. litt. 1940-1959, 1963, p. 227-231 (bibliogr.).

Nieuwenhuis, Anton Willem

LITERATURE. (1) Add: *Peterm. Geogr. Mitt.* 44, 1898, p. 9-13, map.

\*Niimura, Tarô

(1917, Shimosuwa-machi, Nagano Pref., Japan; 1951, Tokyo, Japan), graduated from Suwa



Middle School in 1935; Laboratory worker of the National Science Museum at Tokyo, 1938–51. He accompanied Y. SATAKE (see there) to New Guinea.

COLLECTING LOCALITIES. *W. New Guinea*, March to June 1943.

COLLECTIONS. About 700 sheets of flowering plants and ferns; *Herb. Nat. Sc. Mus. Tokyo*.

**\*Nomura, Noboru**

(1905, Niihama, Kyoto Pref., Japan; x) graduated at Kyoto Normal School; teacher at an elementary school in Kyoto.

COLLECTIONS. Collected in Johore (*Malaya*) (Aug. 1936); in *Herb. Kyoto*.

**\*Noona Dan Expedition**

from the University of Copenhagen, 1961–62.<sup>1</sup> In total 19 persons of different disciplines participated.

ITINERARY.<sup>1</sup> *Noona Dan Expedition, 1961–62*. 1961. The 'Noona Dan' arriving in *Mindanao* on Aug. 1; *Palawan*: lowland near Brooke's Point (2 months), collecting from Uring-Uring (Aug. 13–26), Penigisan (Sept. 1–2), Tagimbung (5–13), Penigisan (15–21), Makagwa (21–25), Uring-Uring (29–Oct. 1); *Ursula I.* (Oct. 2); *Balabac I.* (4–12); *Tawi-Tawi*: Tarawakan (19–27); *Luzon*: Mt St. Thomas (Nov. 5); *Tawi-Tawi*: Tarawakan (13–17), Lapid-Lapid (17), Batu-Batu (18), Lapid-Lapid (20–22), Batu-Batu (26); *Bongao I.* (26); *Papahag I.* (26); *St. Cruz I.*, Zamboanga, *Mindanao* (Dec. 11); *Sapamoro*, NE. of Zamboanga (16–20).—1962. *Bismarck Archipelago*: *New Ireland*, Kavieng (Jan. 12), the nearby *Nago I.* (13), *Mussau* (16–Feb. 18); *Manus* (20), *Dyaul* (Mar. 2–10), *New Hanover* (Mar.); *New Ireland*: *Kalili* (Apr. 8–9), *Lelet* (Apr.); *New Britain*: *Yalom* (May 22–23); *Manus* (June 22–25); *Hermit Is.*: *Luf I.* (27); *New Britain*: *Cape Hoskins* (July 5–10); *Credner I.* (17); *New Britain*: *Matupi* (20), *Vulcan Point* (23), *Rabaul* (24); *Solomon Is.* (Aug. 18–30).

COLLECTIONS.<sup>2</sup> *Herb. Copenhagen*: c. 3300 nos; during the last part of the expedition attention was specially focussed on the collecting of *Fungi*.

For collectors see under S.-E. SANDERMANN OLSEN, M. E. KØIE, H. DISSING, S. F. CHRISTIANSEN, and T. L. WOLFF.

Unfortunately hardly any duplicate material was collected; the labelling was rather unsatisfactory for a period after S.-E. SANDERMANN OLSEN left the expedition.

LITERATURE. (1) T. WOLFF: 'The Noona Dan Expedition' (*Nature* 198, 1963, p. 1044–1045); in *Noona Dan Paper no 19*.

Cf. also: 'Chronological List of Localities in Noona Dan Paper No. 55' (*Dansk Bot. Ark.* 25, no 2, 1967, p. 18–19 and maps 1–7).

(2) 'Botanical Report of the Danish Noona Dan Expedition 1961–62 to The Philippines, The Bismarck Archipelago, and The Solomon Islands' (*Noona Dan Paper no 55* in *Dansk Bot. Ark.* 25, no 2, 1967, 88 pp., 27 fig.). For the list of numbers and localities see p. 19–20.

B. O. VAN ZANTEN: 'Mosses of the Danish Noona Dan Expedition to the Philippines, Bismarck Archipelago and the British Solomon Islands' (*J. Hattori Bot. Lab.* 31, 1968, p. 135–151).

**\*Noor bin Jumaat, Mohd**

= NUR BIN JUMAAT (see there). In 1970 he collected with Dr E. A. HEASLETT in Johore, with T. C. WHITMORE in Taman Negara, Pahang, and with Dr R. HILL in Johore, all *Malaya*.

**\*Nooteboom, Hans Peter**

(1934, Waingapoe, Sumba, Dutch East Indies; x), botanist, taking his M.Sc. at Leyden University in 1961; employed at the Laboratory of Experimental Plant Taxonomy at Leyden. He is working



J. P. VAN NIEL

on a thesis on the taxonomy and phytochemistry of the *Symplocaceae*. Earlier he worked on *Papilionaceae* and *Simaroubaceae*. In 1969 and 1970 he made explorations in Malesia and Thailand for supplementary collections of *Symplocos*, sponsored by WOTRO.

COLLECTING LOCALITIES. 1969. N. Thailand (Jan. 6–27); *W. Java*: Tjibodas and Mt Pangrango (Feb. 11–15); *Sabah* (former N. Borneo): G. Alab (19–27), Mendulong (Mar. 3), Sg. Muyaya (G. Lumaku (4–7), Malaman (9), Tambunan (15–16), Ingaran (18), G. Trusmadi (20–21). Repatriated after an unfortunate fall, returning in the next year.—1970. *Sarawak*: arrival at Kuching (Mar. 1); *Sabah*: to Kota Kinabalu (3), and resthouse Kinabalu National Park (1500 m) (4); Mt Kinabalu (5–13), also on Penibukan Ridge; Kota Kinabalu (14), Sandakan (16). *Sarawak*: with P. CHAI in the environs of Bario (25–29); to G. Murud (Mar. 30–Apr. 4); ascent G. Murud (4–11); return at Bario (13) and collecting in the

environs (up to 20); Apo Batu Buli Range and mountain plain between this range and Batu Lawi (22–27); P. CHAI staying another week.

COLLECTIONS. *Herb. Leyden*: c. 1600 *Borneo* (Sabah and Sarawak) numbers, including the collection made by P. CHAI (see above).

\*Nordin, see Forest Dept North Borneo.



NOOTEBOOM

**Noroña, Francisco**  
(c. 1748, Sevilla, Spain; Jan. 12, 1788, Mauritius).

A letter (to M. VAN MARUM, dated March 29, 1819; in Arch. Dutch Society of Sciences at Haarlem) from C. G. C. REINWARDT (see there) in Java, it is evident that the latter had the disposition of a set of NOROÑA's plates. As the

Rijksherbarium at Leyden and Herb. Bog. have no set, it is probably that set which was presented to Berlin, presumably by REINWARDT or later by HASSKARL.

LITERATURE. (10) Replace by: C. G. G. J. VAN STEENIS & M. J. VAN STEENIS-KRUSEMAN: 'The Plates of Javanese Plants of Francisco Noroña with a revised evaluation of his generic names' (Regn. Veg. 71, 1970, p. 353–380).

BIOGRAPHICAL DATA. Add: Bull. Acad. Malg. n.s. 35, 1958, p. 13–16; Dict. of Maurit. Biography p. 757.

**Norris, Sir William**

COLLECTIONS. Add: and in *Herb. Oxford*.

**Nouhuys, Jan Willem van**  
(d. 1962, Netherlands).

BIOGRAPHICAL DATA. Add: Tijds. Kon. Ned. Aardr. Gen. 2e reeks 81, 1964, p. 1–4, portr., bibliogr.

**NT nos**

stand for Numbered Trees, distributed in the SAN series.

\***Nur bin Juma(a)t, Mohamad**

See sub H. M. BURKILL 1959. Identical with M. NOOR BIN JUMAAT (see there).

**Nur bin Mohamed Ghose, Mohamed**

(d. Nov. 1958, Singapore).

COLLECTIONS. Add: Dupl. *Malay Peninsula* (1937–59), with SINCLAIR, SHAH & KADIM BIN ABDUL in *Herb. Edinb.* Sometimes as NOOR on the labels.

BIOGRAPHICAL DATA. Gard. Bull. Sing. 17, 1959, p. 331–336, portr.

\***Nusi, A.**, see Boswezen Nieuw Guinea.

**Ochse, Jacob Jonas**

(d. 1970).

BIOGRAPHICAL DATA. Add: Bull. Fairchild Trop. Gard., July 1970, p. (6)–(12).

\***Ogata, Dr Ken**

of the Forest Experiment Station, Meguro, Tokyo, collected a large number of wood samples with reference herbarium specimens in *Sabah* (2nd half 1968); the first half of the year he was in *Malaya*, collecting at least on G. Gajah and G. Tempurong in Perak (Feb. 14–15).

**Ohna, Miss H. S.**

Add: took a Ph.D. in pharmacy in the U.S.A.

**Olegario Jr, D.**, see Philippine National Herbarium.

\***Olsen, Sven-Erik Sandermann**

(1920, Helsingør, Denmark; x) was educated at the Pharmaceutical Highschool, Copenhagen (cand. pharm. 1944). Pharmaceutical chemist, since 1966 at Vesterbro Apotek, Copenhagen.

He participated in the Danish 'Noona Dan Expedition' (see there for itinerary etc.) from July 31, 1961–Feb. 20, 1962.

**BIOGRAPHICAL DATA.** Dansk Bot. Ark. 21, 1963, p. 45, 244 (bibliogr.).

**Oosterzee, Louis Albert van**

**LITERATURE.** (1) Add: For annotations on the itinerary cf. W. VINK in Nova Guinea, Bot. 22, 1965, p. 482–483, fig. 2 and 5.

**Ooststroom, Simon Jan van**

Add: Retired Feb. 1971.

**BIOGRAPHICAL DATA.** Blumea 19, 1971, p. 1–2, portr.

**\*Opid**

accompanied E. F. DE VOGEL (see there) to *S. Borneo (Kalimantan Selatan)* in 1973, and evidently collected in a series of his own.

**\*Orden, J.,** see Philippine National Herbarium.

**Osbeck, Pehr**

**LITERATURE.** Add: (5) C. HANSEN & A. FOX MAULE: 'Pehr Osbeck's collections and Linnaeus's Species Plantarum (1753)' (Bot. J. Linn. Soc. 67, 1973, p. 189–212, 6 pl., 1 fig.).

**BIOGRAPHICAL DATA.** Add: G. & BO PETTERSON: 'En Reseberättelse av Prosten Pehr Osbeck år 1776' (in Årsb. Varbergs Museum 1967, 22 pp., portr. and summary).

**\*Othman bin Haron, A. F. O.**

ecologist, Assistant Forest Botanist, Sandakan. **COLLECTING LOCALITIES.** 1964. *Sarawak* (NW. Borneo): ecological expedition on Tau Range (July–mid Oct., 600 nos coll.); area of Bt Raya, Pelagus, and Bah Sama P. F., Ulu Rejang (Nov.); area of the Ulu Segan and Nyabau block, Similajau F. R., and Bintulu (Dec.).—1969. *Sarawak*. A month's collecting expedition to the middle reaches of the Balleh R. (Nanga Menyong) and overland to Bukit Mersing (in the 4th Div.) for another month.

**COLLECTIONS.** *Herb. Sandakan*.

**Otto-Surbeck, Rosa Lydia**

**COLLECTIONS.** Add: At least up to 1964; dupl. pres. to *Herb. Leyden*.

**\*Overstreet, Miss Elsie**

later married a Mr BURR, living in California. **COLLECTING LOCALITIES.** 1937. *Penang* (Sept. 30); Thailand: Bangkok (Oct. 13, 16); *Sumatra*: Palembang (22), Lahat (23), Ranau (24, 27), base of G. Dempo (27), Pageralam to Tjoeroep (28–29); *Java*: Poentjak (Nov. 5), Borobudur (8), G. Bromo (11).

**COLLECTIONS.** Small duplicate set in B. P. Bish. Mus. *Herb. Hawaii* (pres. 1938), identified at Leyden in 1968; some specimens in *Herb. Leyden*. All together about 1000 nos; location of 1st set unknown.

**Oye, Paul Herman Gustaaf van**

(d. 1969).

**BIOGRAPHICAL DATA.** Add: *Hydrobiologia* 35, 1970, p. iii–xxvii, portr.; *Biol. Jahrb. Dodonaea* 38, 1970, p. 7–38, portr., bibliogr.; *Vakbl. Biol.* 50, 1970, p. 66–67.

**P nos**

see J. W. PURSEGLOVE (personal collections). To be cited under his full name.

**\*Pachiappan, G.**

Laboratory Assistant, University of Malaya, Kuala Lumpur, will continue collecting for the Phytochemical Survey of Malaya after the departure of J. CARRICK (end 1967). He is a vigorous field worker, who has learned many skills in both Botany and Chemistry Departments.

**COLLECTIONS.** From 1968 he will make field collections with TEO LEONG ENG (see there); they will begin their numbers as T. & P. 1 (PCSM no 2601).

**\*Paie, Ilias,** see Forest Dept Sarawak.

**Palla, Eduard**

Add: evidently visited *S. Sumatra* in Feb. 1901, as a *Scleria* was collected at Pladjoe (Palembang) on the 26th.

**COLLECTIONS.** Add: Dupl. in *Herb. Vienna*.

**\*Palo, S. L.,** see Philippine National Herbarium.

**\*Palser, Barbara Frances**

(1916, Worcester, Mass., U.S.A.; x) was educated at Mt Holyoke College, B.A. 1938, M.A. 1940; Ph.D. University of Chicago 1942; Instructor Botany Univ. Chicago 1942–45, Assistant Professor 1945–51, Associate Professor 1951–60, Professor 1960–65; Associate Professor of the Dept of Botany, Rutgers University, New Brunswick, N.J., U.S.A., 1965, and Professor since 1966.

Author of several papers on the morphology of *Ericaceae*.

**ITINERARY.** 1969. *Luzon*. Touring the Mountain Province (May): from Baguio (Mt Santo Thomas) to Bontoc (Mt Data, Mt Polis) and Banaue.

**COLLECTIONS.** *Ericaceae*, nos 6901–6924, a set of which in *Leyden Herb.*; pickled material for morphological investigation at home. First collection since LOHER of *Rhododendron zollingeri* J.J.S. in Luzon; also recollection of *Diplycosia parvifolia* on Mt Polis (1st collection was lost at Manila). Dupl. *Philippine Ericaceae* and *Epacridaceae* in *Herb. D.S.I.R. Christch.*

**BIOGRAPHICAL DATA.** Amer. Men of Science; Who's Who of American Women ed. 5, 1968–69.

**Pancho, Juan V.**

Later Professor in Botany.

**COLLECTING LOCALITIES.** Add: Collecting tour (Oct. 17, 1964–Jan. 23, 1965) in *Luzon*: Mt Sto Thomas and vicinity, Mountain Prov.; Mt Makiling and Mt Banahao, Laguna; Atimonan, Quezon; Taal Volcano, Batangas; Mt Isarog, Camarines Sur; Mayon Volcano, Albay; Bulusan Lake, Sorsogon; in *Negros*, NW. part; in *Mindanao*: Davao, Marawi, Lanao del Sur; in *Basilan* and *Palawan* (Puerto Princesa).

**COLLECTIONS.** Add: He accompanied the Dutch wasp specialist J. T. WIEBES, for whom he collected *Ficus* plants (43 spp.) and a few others, numbered in PANCHO's series, 4161–4271. The plants were sent to CORNER, *Herb. Cambridge*.

**\*Panoff, Mr and Mrs (Michell and Françoise?)**

Anthropologists working in the Jacquinot Bay area, *New Britain*, collected plants. Partly in *Herb. Lae* (no dupl.): 187 nos in total. Authors of 'l'Ethnologue et son ombre' (Paris 1968).

**Park, Mungo**

Correct: His voyage to Bencoolen (*S. Sumatra*) took place in 1793-94, the 'Worcester' sailing from Portsmouth Apr. 5, 1793, returning at Moorings May 2, 1794.<sup>2</sup>

LITERATURE. (2) Cf. CH. HARDY: 'Register of ships employed in the Service of the Hon. United E.I.C. etc.' (London 1799) p. 61.

**Paijmans, Kees**

Add: (1921, Dordrecht, Netherlands; x) from 1956-62 Forest Officer, Forestry Department, Ghana (W. Africa); from 1963 Plant Ecologist, C.S.I.R.O., Division of Land Research, Canberra, Australia.

His papers include a publication on Mt Albert Edward.<sup>4</sup>

COLLECTING LOCALITIES. 1950-51. *Nunukan I.* (off NE. *Borneo*).<sup>1</sup>—1963. *Papua*: c. 100 miles east of Port Moresby and 50 miles southeast of Popondetta in lowland rain-forest and savannah, sea-level to about 4000 ft.<sup>2</sup>—1967. *W. Papua*: Fly River region to c. 400 ft, also in monsoonal forest.<sup>3</sup>

COLLECTIONS. Add: *Herb. Canberra*: nos Pj 1-174 (coll. 1963), and Pj 175-453 (coll. 1967).

LITERATURE. (1) See internal report of the Indonesian Forestry Department.

(2) K. PAIJMANS: 'Vegetation of the Safia-Pongani area, (in Lands of the Safia-Pongani area, Territory of Papua and New Guinea. Land Research Series no 17, C.S.I.R.O., Australia 1967).

(3) K. PAIJMANS: 'Vegetation, forest resources and ecology of the Morehead-Kiunga area' (in Land resources of the Morehead-Kiunga area, Territory of Papua and New Guinea. Land Research series no 29, C.S.R.I.O., Australia 1971).

(4) K. PAIJMANS & E. LÖFFLER: 'High-altitude Forests and Grasslands of Mt Albert Edward, New Guinea' (*J. Trop. Geogr.* 34, 1972, p. 58-64, 2 fig., 2 pl.).

PB nos, see O. BECCARI.

**PCSM nos**

are used by contributors to the Phytochemical Survey of Malaya of the Federation, Kuala Lumpur. If KL is on the same label, only the latter should be cited.

**Peekel, Gerhard**

BIOGRAPHICAL DATA. Add: In STREIT & DINDINGER, *Bibl. Missionum* 21, 1955, p. 458-460, bibliogr.

**\*Pemberton, Cyril Eugene**

(1886, Los Angeles, Cal., U.S.A.; x) well-known entomologist (Hon. Sc.D. of Hawaii) of the Exp. Station of the Hawaiian Sugar Planters' Association (1919-53), collected sugar-cane varieties on behalf of that association, together with JESWIET and BRANDES (see those) in *E. New*

*Guinea* in 1928; in 1929 he collected cane in the vicinity of Rabaul, *New Britain*.

In 1937 he made a 3-months visit to New Guinea and the Bismarck Archipelago together with C. G. LENNOX (see there) for the collecting of true seed of wild relatives of the sugar-cane. They visited *New Hanover*, *New Ireland*, *N. New Britain*, and Austr. *New Guinea* (Kainantu, Wau-Bulolo, Salamaua).<sup>1</sup>

It is not known to me whether he made herbarium specimens.

LITERATURE. (1) Cf. *Hawaiian Plant. Rec.* 55, 1958, p. 213; *Cane Growers' Quart. Bull.* 15, 1951, p. 41-42.

BIOGRAPHICAL DATA. In *Amer. Men of Science* (Phys. & Biol.) ed. 10, 1961.

**\*Pennek, Sutan**

collected in *Nunukan I.* near E. Borneo (Kalinmantan) in March and July 1951. Evidently with K. PAIJMANS (see there) and probably numbered in the same series.

COLLECTIONS. In *Herb. Bog.*; dupl. in *Leyden*, *Kew*, *Dehra Dun*.

**\*Pennington, T. D.**

(1938, Ewell, Surrey, England; x), B.A. (Botany) 1960, and Ph.D. (1965), both at Oxford University. Research Officer Dept of Forestry Oxford, 1965-70.

The Leverhulme Trust Fund sponsored his tour to the Far East, 1963-64.

His work on generic delimitation of the *Meliaceae*<sup>1</sup> came to an abrupt stop in 1970, when financial support for tropical taxonomy was cut by 50%. He started his own horticultural business and now devotes part of his time on taxonomy, usually at Kew.

ITINERARY. 1963. *Malaya*, West Coast (Sept.); *Sarawak* (Oct.): Lundu, Rejang River, Kapit; *Sabah* (Nov.): Sepilok, lower slope Mt Kinabalu; *Singapore* and East coast *Malaya* to Mersing (Dec.).—1964. *Terr. of New Guinea* (Jan.): Lae-Wau, Bulolo; *New Britain*, Honiara, New Caledonia, Fiji (Suva).

COLLECTIONS. *For. Herb. Oxford*: c. 350 numbers, mainly *Meliaceae*, with a few *Ebenaceae* and *Chrysobalanaceae* dupl. in *Sing.*, *Kep.*, *Kuching*, *Sandakan*, *Lae*, *Honiara*, *Suva*.

LITERATURE. (1) Author of 'Materials for a monograph of the *Meliaceae* I. A revision of the genus *Vavaea*' (*Blumea* 17, 1969, p. 351-366, 2 fig.).

BIOGRAPHICAL DATA. Photogr. in *Principes* 9, 1965, p. 110, fig. 98.

**Penzig, Otto**

LITERATURE. (2) Add: 'Come nasce una foresta virgine' (*La Lettura* 24, 1924, p. 833-838, 13 fig.).

**Peters, Christian**

Add: His voyage with Capt. HAGEMEISTER was made in the 'Krotky'. Collections in *Herb. Leningrad*.

\*Petersen, H. J. van, see Boswezen Nieuw Guinea.

**\*Petlo, G. J.**

collected no 20, *Digitaria argyrostachya* (STEUD.)

FERN. at Banjoebiroe, Semarang (*Centr. Java*), at 470 m, in 1916. In *Herb. Bog.* with BACKER label and writing.

**\*Phang, C. I.**

collected ferns from Bt Anak Takun, Selangor, *Malaya* (Sept. 15, 1960). Phanerogams too?

**Philippine National Herbarium**

To Suppl. Cycl. Fl. Mal. I, 5, 1958, p. cccc under above-mentioned entry, add the following collectors:

1. H. G. GUTIERREZ\*, ERN. J. REYNOSO\*, R. M. DEL ROSARIO\*.
2. MELECIO AGRA (1955), B. ALDOS (1955), G. BANLUGAN, CAROLYN, P. CORDERO, MRS ELISA D. DAWA (1951), VICTORINO GABOT (1955), GERARDO LANDINGIN (1955), P. P. LAZO (1955), RICARTE MARTIN (1955), V. MENOR (1955), P. NARCISO JR (1955), D. OLEGARIO JR (1955), JOSÉ ORDEN (1955), S. L. PALO (1956), R. QUITOLES (1955), P. P. SUMAGUE (1955), J. B. SUSARA (1955), M. TOLENTINO, C. VALDEZ.

Several of the 1955 collections were made in Jan.–Feb. on Mt Maquiling, Laguna Prov., *Luzon*, possibly by participants of a forestry course.

Names with asterisk see separate entry.

COLLECTIONS. *Herb. Manila*; dupl. to *Leyden*, *Kew*, *Arn. Arbor.*, *Sing.*, *U.S. Nat. Mus.*, *Bogor*, *etc.*

**\*Philipson, Melva Noeline**

(1925, Palmerston North, New Zealand; x) took her B.Sc. (1948), and her M.Sc. (1953) at the University of New Zealand; on the staff of the Dairy Division Dept of Agriculture, 1949–51; in the Microbiology Dept, Canterbury Agricultural College, 1951–55; in the Botany Division D.S.I.R., from 1963 onwards.

ITINERARY and COLLECTIONS.<sup>1</sup> 1968. *Terr. of New Guinea*. With her husband, W. R. PHILIPSON (see there).

LITERATURE. (1) MELVA N. PHILIPSON: 'Plant Hunting in New Guinea' (*New Zeal. Rhodod. Assoc. Bull.* no 54, 1969, p. 10–14).

**\*Philipson, William Raymond**

(1911, Newcastle-upon-Tyne, England; x), B.A. Cambridge University (1933), Research Student, Kew Gardens (1933–35), Ph.D. London University (1947); on the staff of the Dept of Botany, British Museum, 1935–51; since 1957 Professor of Botany in the University of Canterbury, Christchurch, New Zealand. Besides in New Guinea, he collected in Jamaica (1939), Columbia (1953), New Zealand (1953), and the Cook Islands (1969).

Specialist and author on *Araliaceae*.

COLLECTING LOCALITIES. 1968. *Terr. of New Guinea*: environs of Lae (Aug. 4), Kassam Pass and Kainantu (5), Okapa Road and back to Lae (6); environs of Wantowat, Finisterre Range (7–10); Edie Creek (13–16); to Goroka by road (20); to Mt Wilhelm by air (21); to Kundiawa by road, Chimbu Valley (26); Kerawagi and Korongl River (27), over Daulo Pass to Goroka (28); return to Lae by road (29).

COLLECTIONS. *New Guinea* collections made jointly with his wife, M. N. PHILIPSON (see there);

mainly *Rhododendron* and *Araliaceae*, nos 3250–3535; first set Bot. Div. DSIR, *Lincoln*, New Zealand; not complete dupl. sets at *Leyden*, *Edinb.*, *Kew*, *Arn. Arbor.*

**\*Philpotts, Miss**

In *Herb. Kew* a *Cleome* from *Singapore* (*culta*).

**\*Phytochemical Survey**

of the Federation of *Malaya*, *Kuala Lumpur*.

COLLECTIONS. Numbered in the KL series, by various collectors. See also PCSM.

**Pierot, Jacques**

Add: (died on the outward journey, and not on the home-voyage). There are contradictory data on his role in the foundation of the Dutch horticultural society.

COLLECTIONS. It is evident from letters in the archives of the *Leyden Herbarium* that the Japanese plants ascribed to J. PIEROT were bought in Java for joint account of him and G. BISSCHOP (The Hague). They were sold to the Rijksherbarium in January 1844. This collection has labels written by MIQUEL on which PIEROT is mentioned as collector. All these specimens have a 2nd label with a number, and generally some dates on locality, and vernacular names. By comparison Prof. Dr H. J. VENEMA found that the latter labels were written by H. BÜRGER and that the collection must be a duplicate set of the same.\* In 1841 BÜRGER was in Holland, and it is still a mystery who sold this set of BÜRGER plants.

LITERATURE. (2) Cf. Meded. Bot. Tuinen Belm. Arb. 3, 1959, p. 58.

**\*Pierre, Louis**

(1833, Champ-Borne, Réunion; 1905, Paris), son of a sugar planter, studied medicine in Paris and Strasbourg, but did not finish his studies due to family circumstances. In 1861 he went to India as the collaborator of THOMAS ANDERSON in the Calcutta Botanic Garden. In four years time he developed himself in a way that the English were eager to keep him in India, but he preferred to be in a French colony, and was from 1865–1877 in charge of the Jardin botanique at Saigon. In those years he organized numerous expeditions in the interior of Cochinchina, Cambodia, and Siam, bringing together the materials for the 'Flore forestière de la Cochinchine' and the later 'Flore de l'Indo-Chine'.

After a study tour in Java and India in connection with *Cinchona* culture, he returned to Paris to work on his tree flora and on several plant families.

*Hopea pierrei* and several other plants have been named after him.

COLLECTING LOCALITIES. 1877. *W. Java*: probably at Batavia, Bogor, Tjibodas, G. Gedeh-Pangrango, and eventually in the Preanger Regencies (Mts Malabar, Papandajan, *etc.*).

COLLECTIONS. *Herb. Paris*, small collection.

\*Ping, Patrick, see Forest Dept North Borneo.

Pj nos, see K. PAIJMANS.

**Pleyte, Didit Rudolf**

LITERATURE. (1) Add: For sketch map of Misool I. with principal collecting localities, see *Nova Guinea* n.s. 9, pt 2, 1958, p. 298.

PNH *nos*, see Philippine National Herbarium.

**Poivre, Pierre**

COLLECTIONS. At the end add: also MSS in the library of Angers (France).<sup>6</sup>

LITERATURE. (3) Add: According to MADELEINE LY-TIO-FANE, in 'Mauritius and the Spice Islands' (see *sub* BIOGR. DATA) not all the statements are reliable and less satisfactory details have been omitted or glossed over.

(6) A summary of POIVRE's observations on the cultivation of the spice plants at Isle de France (B. Angers, MS 612, p. 569, fig. 28).

BIOGRAPHICAL DATA. Add: In M. LY-TIO-FANE (ed.): 'Mauritius and the Spice Trade. The Odyssey of Pierre Poivre' (Publ. no 4, of the Mauritius Arch. Publ. Fund, Port Louis 1958, w. portr. and photogr. of seal); M. LY-TIO-FANE: 'Pierre Poivre et l'expansion française dans l'Indo-Pacifique' (Bull. Ecole Franç. d'Extr.-Orient 53, 1967, p. 453-511, pl. I-XIV); 'Commémoration du bi-centenaire de l'arrivée de Poivre à l'île Maurice 1767-1967' (Proc. R. Soc. Arts & Sci. Mauritius 3, 1968, p. 101-130); 'Poivre's contribution' in 'Mauritius and the Spice Trade' II (The Triumph of Jean Nicolas Céré, Paris/The Hague 1970, p. 109-110).

**\*Polunin, J.**

collected in *Br. N. Borneo* (Aug. 1953); in *Herb. Sing.*

**\*Poore, Martin Edward Duncan**

(1925, Dunkeld, Scotland; x) was educated at Edinburgh University (1946-47), and at Cambridge University (1947-52; M.A., Ph.D.). Professor of Botany at the University of Malaya, Kuala Lumpur (1959-64), Dean of Science there (1964-65); appointed Lecturer in Commonwealth Forestry Institute, Oxford, in 1965. Since 1966 Director of the Nature Conservancy, London. As ecologist he joined the 2nd Royal Society Expedition to Mt Kinabalu, N. Borneo, in 1964.

COLLECTING LOCALITIES. From 1959-65 in Malaya, especially in Selangor, the Cameron Highlands and Fraser's Hill. In 1964: *N. Borneo* (cf. CORNER and CHEW WEE LEE).<sup>1</sup>

COLLECTIONS. Three large crates presented to *Herb. Univ. of Malaya* (KLU) (1966).

LITERATURE. (1) C.-CH. HO & M. E. D. POORE: 'The value of Mount Kinabalu National Park, Malaysia, to plant ecology' (Mal. Nat. J. 19, 1965, p. 195-202, map, 5 photogr.).

**Poeta, Sicco Martinus**

(d. Feb. 26, 1968, Bandung, Indonesia).

COLLECTIONS. Add: Many specimens for the educational herbarium of the 'Institut Teknologi Bandung', of which he was keeper since 1950.

**Porsch, Otto**

(d. 1959, Vienna, Austria).

**Posewitz, Theodor**

LITERATURE. (1) Add: and in Peterm. Geogr. Mitt. 32-33, 1886-87.

**\*Postels, Alexander F.**

geologist who accompanied LÜTKE's voyage in the 'Senjavin' (see *sub* MERTENS). He collected a few plants in Alaska (cf. Bot. Not. 1940, p. 300) and might have collected elsewhere during the voyage. In *Herb. Leningrad*.

**Potts, John**

COLLECTIONS. Add: *Herb. DELESS. (Geneva)* (cf. Taxon 19, 1970, p. 536). It seems very improbable that he collected in Sumatra; specimens from the latter island will have been collected either by RAFFLES or W. JACK.

**\*Pound, D.**

He might be identical with JAMES POUND (1669, Bishop's Canning, Wiltshire, England; 1724) who matriculated at Oxford in 1687, graduated B.A. and M.A. in 1694; medical diploma 1697 with a degree of M.B. Having taken orders, he entered the service of the E.I.C., went out to Madras in 1699 as a chaplain to the merchants of Fort St. George, whence he proceeded to the British settlement of Pulo Condore off Thailand. Upon the mutiny of the native troops there on March 3, 1705, he escaped to Malacca and ultimately reached Batavia. He returned to England in 1706, where he was presented a rectory. He did important work in astronomy. His collections and papers were destroyed in Pulo Condore, but it seems quite possible that he collected some plants in Java.

COLLECTIONS. In *Herb. Oxford* (with Herb. DuBois) one specimen 'collectum a D. POUND in insula Java'; probably early in the 18th century.

BIOGRAPHICAL DATA. In Dict. of Nat. Biogr. vol. xlvii, 1896.

PP *nos*, see O. BECCARI.

**Pratt, Antwerp E.**

LITERATURE. (3) Add: Some additional information on his stay in the Anggi Lakes region by W. VINK in *Nova Guinea*, Bot. 22, 1965, p. 484.

**\*Price, Michael**

from Columbia University, arrived at Los Baños Agricultural College in 1968. He finished his degree in 1971. Now Research Instructor in the College of Agriculture Herbarium, Los Baños Units College, Laguna, Philippines. He is specially interested in ferns. Collections?

**\*Priyanto, Botjah**

(1942, Djombang, E. Java; 1969, Makassar, S. Celebes), was educated at the (Bogor) Tjiawi College of Agricultural Sciences (B.Sc. 1962), and joined the Botany Division of the Forestry Research Institute; in 1963 he continued his education at the University of Edinburgh (Ph.D. in 1966, on taxonomic studies in the *Scrophulariaceae*), subsequently studying for a year at Stockholm and two months at Utrecht, in palynology.

COLLECTING LOCALITIES. Joined collecting trips by KOSTERMANS (see there) to Udjon Kulon Nature Reserve in *W. Java* and *Sumbawa I.*, in



1968 joined M. JACOBS (see there) in an expedition to *South Sumatra*. In 1969 he took part in a trip to *SW. Celebes* with E. LARSEN (see there) where they met a tragic death in a car accident.

BIOGRAPHICAL DATA. Reinwardtia 8, 1970, p. 1-2, portr., bibliogr.

#### Prince, John

Add: (1770, baptized at the Parish Church Greenwich, Kent, England; ?) was appointed on the Fort Marlborough establishment (Benkulen) of the E.I.C. in 1786, arriving there on 29 Aug. 1787. Appointed Assistant to the Resident of Natal (MAIDMAN) on 31 March 1790, and following the French capture of the northern settlements in 1794, he took MAIDMAN's place, holding the post until April 1798. In that year he went to Tapanuli, where he was appointed Resident on 20 June 1801. In December of that year he and his wife went to Calcutta on leave to recover their health, but returned to Tapanuli in 1802. In 1816 provisionally appointed to take charge of Fort Marlborough, but that was revoked in favour of somebody else. PRINCE was employed by RAFFLES along with WILLIAM JACK, on a mission to Pulu Nias in September 1820, and P. succeeded R. as superintending officer in charge of Benkulen during the transfer of the British west coast establishments to the Dutch in 1825. Later in the Straits as Resident Councillor, taking an active interest in the attempts to keep going the Botanical Garden started by RAFFLES.

Dr J. BASTIN was so kind to give above information; he found evidence quite opposed to JACK's description of PRINCE (see Cycl. Fl. Mal. I, 1). RAFFLES in a letter to his sister wrote (Sing. 18 Nov. 1825; India Office Library: Drake collection MSS Eur. D 742) that "it has been said that he is not only a Prince by name but a Prince by nature too". This judgement was shared by Baptists missionaries and others.

COLLECTIONS. Add: His despatch of seeds and flowers of the Sumatran camphor tree to ROXBURGH enabled COLEBROOKE (who received them due to ROXBURGH's departure for England) to give his excellent account of the plants in Asiatick Researches xii (1816). PRINCE's own description of the plant is given too (Dr J. BASTIN *in litt.* July 1972).

Proppe, Dr Gregor Joseph  
collected at Madiun too.

#### Provost, Jean-Mathieu-Simon

Add: (1728, Auray, France; before 1778, ? Isle de France) served as supercargo of the 'Compagnie des Indes', spoke Malay fluently, and later settled at Isle de France. He was picked by POIVRE as technical leader to obtain spice plants in the Moluccas. Early 1768 he sailed to Kedah in the 'Vigilant' to contact the Macassarese traders. This resulted only in a promise from the Macassarese, and in May 1769 he set out once more and proceeded to the Philippines and the Moluccas, this time with success.

Subsequently he was made Honorary Inspector of the spice plants being grown at the 'Jardin du Roi' in Mauritius. The next year he handed the care of the plants to CÉRÉ (see there) and sailed

again in June 1771 with the 2nd Moluccan Expedition (see *sub* SONNERAT).<sup>2</sup> His visit to Gebe(h) was a great success. The plants were brought to Mauritius and distributed to other French colonies, including Cayenne.

LITERATURE. (1) Add: MAD. LY-TIO-FANE in 'Pierre Poivre et l'expansion française dans l'Indo-Pacifique' (Bull. Ecole Franç. Extr.-Or. 53, 1967, p. 472-473, etc.).



PULLEN, Finisterre Range, 1964

(2) Some pages of his diary are reproduced in MAD. LY-TIO-FANE *l.c. sub* LITER. (1) pl. iv-v. A plan of the harbour of Gebe is reproduced in *l.c.* pl. vi.

BIOGRAPHICAL DATA. M. LY-TIO-FANE, Mauritius and the Spice Trade, 1958, p. 10-11.

PS nos, see O. BECCARI.

PUH nos, see Philippine University Herbarium, Quezon, in Suppl. Cycl. Fl. Mal. I, 5, 1958, p. cexlvii.

#### \*Pukol, Hasan

Collector of the Forest Dept at Brunei, Borneo; numbered in the BRUN series.

#### Pullen, Royal

COLLECTING LOCALITIES. Continued collecting in Austr. New Guinea. 1957. Central Highland.—1958. Lower Ramu River.—1959.

Lower Sepik River and Prince Albert Range.—1961. *Papua*, Southern Highlands: Mendi, lower slopes of Mt Giluwe, Ialibu (June 26–July 8); Ialibu Basin (–July 17); Ialibu, Kagua (–July 25); Kagua, Erave River valley, Mubi Valley, Lake Kutubu (–Aug. 12); Lake Kutubu, Benaria, Tari (–23); Tari, Koroba (–26); Koroba, Korenda, Kwongebi, Tari (–Sept. 3); Margarima, E. slopes of Doma Peaks, Nipa (–9); Nipa, Lai (Kawuku) valley, Mendi (–16); Mendi Basin, ascent of Mt Giluwe to 12,500 ft from W. side (20–23).—1962. *Papua*: Port Moresby-Kairuku area (July 1–Oct. 6), including Laloki, Goldie and Brown Rivers, to Kapa-Kapa and Rigo, S. foothills of Astrolabe Range, to Redscar Bay, Vanapa R., Sogeri Plateau and N. side Astrolabe Range, vicinity of Galley Reach, Kanozia, to Aroa R., to Hall Sound, Angabunga R. and Mekeo area, Biarua R., W. to Palipala Hills, Yule I., Hall Sound, lower reaches of Brown and Vanapa Rivers, mouth of Gallay Reach.—1963. *Terr. of New Guinea*: Western Highlands Distr., leader of the C.S.I.R.O.-Rijksherbarium Expedition to the Kubor Range (June 25–Sept. 11): northern (Wahgi valley) side of the range to S of Minj, camps I–III (resp. at c. 10,600, 11,700, and 13,300 ft), with a climb to Mts Kinkain.—1964. *Papua*: Northern Distr. (July 24–Sept. 14), S. side Hydrographers Range near Siurane, near Numba, Pongani River valley and Falls, western flanks of Sibium Range S of Toma, Barihi R. valley, upper southern slopes and summit ridge of Hydrographers Range to c. 6000 ft. *Terr. of New Guinea*: Eastern Madang Distr., Finisterre Range with the Brit. Mus.-Newcastle upon Tyne Expedition (Oct. 6–Nov. 24; itinerary see sub C. D. SAYERS).<sup>2</sup>—1965. *Not in New Guinea*.—1967. *Papua*: Port Moresby area (Apr.–May), savannah area along Morehead R., W. Distr. (end of July–?).—Mid-1969. Owen Stanley Range, including Mt Wadimana in the Simpson Massif.—1972. Expedition to Mt Suckling in *Papua*, collecting June–July at low altitude with G. LEACH (see also P. F. STEVENS and J. F. VELDKAMP).

**COLLECTIONS.**<sup>1</sup> For the distribution of CSIRO plants see under HOOGLAND. The collection 1959 amounted to 590 nos; in 1961 (June–Sept.) collection series 2637–2890; in 1962 nos 3084–3388; in 1963 nos 5000–5421; in 1964 nos 5422–5950, 5951–6192; in 1967 > 400 nos; dupl. 1964 in *Herb. Edinb.* About 300 nos (8242–8515) were collected by PULLEN on Mt Suckling in 1972. Ecological samples (extra material) were allotted numbers in the series 3810–3823, 6193–6423.

**LITERATURE.** (1) Including a new *Pittosporum*, cf. K. BAKKER in *Nova Guinea* n.s. 9, 1958, p. 339–340, 1 fig.

*Mosses* by E. B. BARTRAM in *Brittonia* 11, 1959, p. 86–98.

(2) A. C. JERMY & C. D. SAYERS: 'An Expedition to the Finisterre Mountains of Eastern New Guinea' (*J. R. Hort. Soc.* 92, 1967, p. 117–128, figs. 54–55, 57–63, 1 map).

#### \*Pulsford, Mary

wife of R. PULSFORD, an Agricultural Officer at Dagua, Sepik District, *New Guinea* (N. coast), collected some tens of plants between 1953–54; in 1968–69 PULSFORD served in the Public Health Department, Port Moresby, Papua.

**COLLECTIONS.** From the Sepik Distr., Terr. of *New Guinea*, low numbers on Dagua airstrip; also with A. G. FLOYD (see there) in the NGF series; in 1969 >136 nos in the UPNG series of the University at Port Moresby.

#### Purseglove, John William

Add: About 1967 appointed Advisor on Tropical Crops for the Ministry of Overseas Development, working at East Malling Research Station, Maidstone, Kent, England.

**COLLECTING LOCALITIES.** Add: 1957. *Sarawak*: Bako National Park (Feb. 2–18) with MOH. SHAH BIN HAJI MOH. NUR.

#### Quaife, Dr

Add: He collected in the Cameron Highlands in Oct. 1940.

#### Quisumbing, Eduardo

Add: He retired as Director in November 1961, and was for some following years attached to the Araneta University.

*Saccolabium quisumbingii* L. O. WILLIAMS has been named in his honour.

**COLLECTING LOCALITIES.** Add: 1960. *Papua* (Sept. 15).—1961. *Batanes & Babuyanes* Expedition (Mar. 25–Apr. 4; with H. GUTIERREZ and R. DEL ROSARIO):<sup>1</sup> *Batan I.*, *Sabang I.*, *Itbayat I.*, *Calayan I.* (May 2–10); interior of SanVicente in Cagayan Prov. (May); *Batan I.* (June 3–8); Mt Iraya (on the summit and on the Pacific side) and Mt Makatarem.—1963. *Borneo* (*Sarawak*, *Brunei*, *N. Borneo*; first half of July):<sup>2</sup> Baku National Park and Santubong; Oran Reserve; Semengoh F. R. (10) and Bau Limestone Hills; Tutong White Sands (11), Badas peat swamps (12).

**COLLECTIONS.** Mostly orchids.

**LITERATURE.** (1) E. QUISUMBING: 'The Vegetation of Batan and Babuyan Islands' (*Symp. Ecol. Res. Humid Trop. Veget. Kuching* 1963: UNESCO Sc. Coop. Off. SE. Asia 1965, p. 31–38).

(2) E. QUISUMBING: 'Orchid Hunting in Borneo' (*Araneta J. Agr.* 11, 1964, p. 76–78).

**BIOGRAPHICAL DATA.** *Portr.* in *Philip. Orch. Review* 7, 1959, p. 33.

\**Quitoles*, R., see Philippine National Herbarium.

#### Quoi, Jean René Constant

**BIOGRAPHICAL DATA.** Add: *Act. Mus. Hist. Nat. Rouen* 27, 28, 1922, p. 486; in *Bibliogr. Austr. Entom.* 1775–1930, 1932.

#### Raap, Hugo

**COLLECTIONS.** Add: is cited to have collected lichens and mosses in Columbia in 1904 (cf. URBAN, *Gesch. Kön. Bot. Gart. Mus. Berl.-Dahl.* 1916, p. 289, 311).

#### Rachmat

(d. Dec. 19, 1957, Bogor, Indonesia).

#### Raciborski, Marian

**BIOGRAPHICAL DATA.** Add: *Ochr. Przyr.* 29, 1963, p. 9–16, w. portr. (w. English summary).

**Raffles, Sir Thomas Stamford Bingley**

The DRAKE collection (cf. Suppl. Cycl. Fl. Mal. I, 5, 1958, p. cccxiii) is now in the E.I. Office, London (inf. by Dr J. BASTIN, July 1970).

BIOGRAPHICAL DATA. J. BASTIN: 'Raffles the Naturalist' (Str. Times Annual for 1971, p. 58–63, col. ill.); 'Raffles in Marble and Bronze' (*ibid.* for 1972, 6 pp.).

**\*Rahim bin Ismail, A.**

of the Forest Research Institute at Kepong, *Malaya*, collected 365 FRI nos (of Kepong) in Pahang, Trengganu, Perak, and Kelantan in 1966–67.

Identical with ABD. RAHIM of the Forest Dept North Borneo? (see there).

**Rahman bin Mohd Ali, (Enche) Abdul**

Add: (1925, near Kuantan, Pahang, *Malaya*; 24 Sept. 1969, Kuantan, *Malaya*) entered the Forest Department in 1947, and left in February 1952 to follow a four-year course in forestry in Australia. After having attained his B.Sc. he returned to *Malaya* as Deputy Conservator of Forests. In 1957 District Forest Officer at Klang, in 1959 at Kuala Pilah; subsequently posted in Trengganu, Johore, in 1963 at the Forest Research Institute, Negri Sembilan, and Kuala Lumpur, acting on two occasions as Deputy Director.

BIOGRAPHICAL DATA. Mal. For. 33, 1970, p. 3–6, w. portr.

**\*Ramli bin Zainuddin**

of the Forest Research Institute at Kepong, *Malaya*, collected 34 FRI nos (Kepong) in the Kinta Hills, Perak.

**Ramos, Maximo**

COLLECTIONS. Add: Also dupl. *Philippines* in *Herd. Edinb.* (1907–12).

**\*Rappaport, R.**

and Mrs RAPPAPOORT (associated with Professor VAYDA, see there) operated at Simbai, Madang District, *E. New Guinea*, in 1963. *Herb. Lae*: c. 420 nos; *Pandanus* to Dr STONE, bamboos and ferns to Dr HOLTUM.

**Rappard, Frederik Willem**

His position in New Guinea was rightly: Head of the Forestry Division of the Dept of Agriculture. Author of a paper on New Guinea.<sup>2</sup>

COLLECTIONS. Besides plants he made large collections of *Aphidae* in Java and New Guinea. In *Herb. Wageningen*: 7 plants from G. Idjen and some from SE. Baluran etc., *E. Java*.

LITERATURE. Add: (2) F. W. RAPPAPOORT & P. VAN ROYEN: 'Some Notes on the Vegetation in the Wissel Lakes Area' (Nova Guinea n.s. 10, 1959, p. 159–176, fig. 1–3, pl. 3–8; in Dutch, English summary).

\*Rashid bin Taggoi, see Forest Dept Sarawak.

**\*Raufer, F.**

was probably in the 1920s or 1930s in the employ of the Forest Department F.M.S., as he collected together with R. E. COLOMB (see in Cycl. Fl. Mal. I, 1, 1950).

\*Read, Mrs, see under Miss L. HAMILTON.

**\*Reed, Dr J. G.**

collected no 14, *Dodonaea viscosa*, Bernam R., Perak, *Malay Peninsula* (Nov. 25, 1941); in *Herb. Sing.* = J. A. REID? (see there).

\*Rehal, see Forest Dept Sarawak.

**Reid, John Alexander**

Add: Author of some botanical papers.<sup>1</sup>

LITERATURE. (1) J. A. REID: 'Klang Gates and Bukit Takun: Reflections of an amateur botanist' (Mal. Nat. J. 5, 1951, p. 109–123, 6 fig.); 'Our changing Flora' (*ibid.* 9, 1954, p. 84–86); 'Plants of the quartz ridges' (*ibid.* 14, 1959, p. 22–31, 2 photogr., map).

**\*Reid, Dr L.**

linguist from the University of Hawaii. For ethnobotanical collection see D. A. MADULID, April 1971 (*Luzon*).

**\*Reilly, P.**

Agricultural Officer in Australian *New Guinea*, in 1968 on Kibagah Plantation, Western Highland District, Papua. He collected a small series of numbers at Garaina, Morobe District, about 1948; in *Herb. Lae*.

**Reinwardt, Caspar Georg Carl**

LITERATURE. (9) Add: For particulars on the drawings of Plant. Ind. Bat. see CL. NISSEN, 'Die botanische Buchillustration' 1951, vol. 2, p. 193.

**\*Reynoso, Ernesto J.**

(1934, Lucena City, Luzon, Philippines; x), Botany-Aide of the Philippine National Herbarium (Bot. Dept National Museum); graduated B.S. at the Far Eastern University.

COLLECTING LOCALITIES. *Philippines*. 1963. Lipuun Point, Quezon, *Palawan*.—1964. Mt Koronon, Sitio Gumate, Davao, *Mindanao*.—1965. *Basilan I.*, *Mindanao*, with H. G. GUTIERREZ & FRAGA; Mt Apoy, Borongan, *Samar*, with H. G. GUTIERREZ.—1966. Mt Guiting-guiting, *Sibuyan I.*, *Romblon*, with H. G. GUTIERREZ.—1967. Victoria Peak, *Palawan*, with R. ESPIRITU.—1968. Mt Pulog and Mt Tabayoc, Benguet, *Luzon*, with M. JACOBS, D. R. MENDOZA, and R. ESPIRITU.—1969. *S. Samar* (see sub GUTIERREZ). Teamed up with the Osaka Museum of Natural History. The following areas were to be visited: Mt Makiling (*Luzon*), Mt Apo (*Mindanao*), Quezon (*Palawan*), Ilo-Ilo basin (*Panay*); see also K. SETO.

COLLECTIONS. Approx. 545 field numbers with PNH (series) numbers in *Herb. Manila* and distributed elsewhere.

**Riche, Claude Antoine Gaspard**

COLLECTIONS. Part of his Mauritius and Réunion plants have been mislabelled 'Java'.

**Richthofen, Ferdinand von**

For the 'Preussische Expedition' see also Peterm. Geogr. Mitt. 8, 1962, 420–424, where letters have been published.

**\*Ridgwell, Ray**

a Technical Officer with the Forestry Department New Guinea; collections in the Bulolo-Wau area, Morobe District, in 1955, and near Brown River and Trans-Vanapa (Oct. 1959), in all some tens of numbers in the NGF series. In *Herb. Lae*.

**Ridley, Henry Nicholas**

ITINERARY. 1915. Add: *Centr. Java*: Borobudur (Feb. 4).



RIDSDALE

BIOGRAPHICAL DATA. Add: Biogr. Mem. R. Soc. 3, 1957, p. 141–159, portr.; Proc. Linn. Soc. Lond. 169th session, 1958, p. 35–38; J. Mal. Br. R. As. Soc. 33, 1960, p. 104–109.

**\*Ridsdale, Colin Ernest**

(1944, Bristol, England; x) graduated B.Sc. (Hons) at Bristol University in 1966. He arrived at Lae, T.N.G., Oct. 1966, on a contract. After his return, end 1968, performing post graduate research on *Uncaria* (*Rubiaceae*).<sup>1</sup> Ph. D. Bristol (1972).

COLLECTING LOCALITIES. *Terr. of New Guinea*. Around Lae (Oct. 1966–Sept. 1968). 1966. Edie Creek, Wau (Nov.); near Cape Gloucester, ethnobotanic collections assisting Prof. DARKE; *W. New Britain*: Salasea (Dec.).—1967. *Bougainville (Solomon Is)* (Jan.–Feb.):<sup>2</sup> Parairi village Kieta and Lake Lotura area; Mt Wilhelm (Feb.); Morobe Distr., Kui (Mar.); Ioma near Popondetta (May). Attached to *New Guinea/West Irian Border Survey Party* with Assistant GALORE (June–Sept.)<sup>3</sup> (see also *sub* SOEGENG), collecting in the foothills

of the Star Mts (c. 4000 ft,  $\pm$  a fortnight), Ingembit (c. 300 ft, 3 weeks), brief stay at Kiunga, and Angamaruk on the Fly River (*Papua*), savannah at Weam on the Bensbach R. (*Irian*) about 3 weeks.—1968. Madang area, *Kar Kar I.* (Jan.). Open Bay *New Britain* Forest Survey with P. KATIK,<sup>4</sup> and a small collection from Locket, c. 2300 ft, on limestone. Murray Pass, Mt Albert Edward with PADDY WOOD (see there) (Aug.).

COLLECTIONS. *Herb. Lae* in NGF series, about 2700 nos; Murray Pass collections (1968) in *Herb. Edinb.* Number series and localities at Lae.

LITERATURE. (1) Author on arborescent *Nauclea* of New Guinea in *Gard. Bull. Sing.* 25, 1970, p. 247–281.

(2) Internal report at Lae.

(3) C. E. RIDSDALE: 'Botanical Results of the New Guinea Border demarcation expedition, 1967' (*Papua & New Guinea Sc. Soc. Trans.* 9, 1968, 22 pp., 6 fig.).

(4) Internal report at Lae.

**Riedel, Johann Gerard Friedrich**

COLLECTIONS. Add: *Herb. Leningrad: Celebes* plants (1869).

**\*Riekerk, Ch.**, see Boswezen Nieuw Guinea.

**\*Ringers, Miss N.**

collected some *Cyperaceae* on Mt Kelud (Kloet) in *E. Java* (1915).

**\*Robbins, Ross Gordon**

(1919, Wanganui, New Zealand; x) was educated in New Zealand (M.Sc. Botany 1950); Ph.D. of the University of New Zealand in 1957, on a thesis on the New Zealand Forest History. From 1942–45 with the New Zeal. Army Forces in the Middle East; 1951–56 University Lecturer in Botany, mostly in New Zealand, but two years in Jamaica (1951–52); 1957–60 Plant Ecologist C.S.I.R.O. New Guinea Land Surveys; 1961–66 Research Fellow in Biogeography, Australian National University; for seven months acting as the first curator of the Canberra Botanic Gardens; in 1966 appointed Professor in Botany in the new university at Port Moresby, Papua, taking up the post in July 1967; in Aug. 1970 he accepted an appointment teaching biogeography at Canberra University.

His major interests are phytogeography and rain-forest ecology in the Pacific. About 1970 he resigned and still lives in Australia.

Some plants, including *Dimorphanthera robbinsii* SLEUM. and *Barbula robbinsii* BARTR. have been named in his honour.

COLLECTING LOCALITIES. 1957. *E. New Guinea*:<sup>1</sup> Eastern and Western Highlands (Goroka-Mt Hagen area) incl. Mt Wilhelm, Mt Hagen, and Mt Giluwe (June–Oct.).—1958. Lower Ramu Valley, incl. Adelbert Ranges (July–Oct.); *W. Java* (Dec.).—1959. *E. New Guinea*: Lower Sepik Valley, incl. Prince Alexander Range (June–Oct.).—1960. Western Highlands, Wabag area (June–Sept.).<sup>2</sup>—1963. In Oct.–Nov. collecting trip in N. Thailand, and proceeding to *Malaya*.<sup>3</sup>—1965. *Philippines. Mindanao*: slopes Mt Talomo (Oct. 2), lower slopes Mt Apo (6), side ridge Mt Apo (c. 2000 m) (7), Mt Talomo (c. 1400 m) (11); *Luzon*:

Mt Pulo (c. 2700 m) (24–25), reaching all the summits.

**COLLECTIONS.** End 1961 totalling from 1–3430; duplicates infrequent. In *Herb. Lae, Leyden, etc.* This collection includes some 750 mosses,<sup>4</sup> of which a small set from *Java*. The CSIRO numbers include a few dozen Queensland rain-forest plants. Thailand collection in ? *Herb. Canberra*; dupl. (nos 3536–3689) in *Bangkok*; mosses also at *Leyden* (from *Malaya* 3690–3709). Some 50 nos from the *Philippines* sent to *Leyden* of which sterile material thrown away. His collections include numbers from New Hebrides, New Caledonia, Fiji, Solomons, *Java*, *Malaya*, New Zealand, U.S.A., Canada, and Hawaii.

**LITERATURE.** (1) R. G. ROBBINS: 'Montane formations in the Central Highlands of New Guinea' (Proc. Symp. Humid Trop. Veg. Tjiawi 1958, 1961, p. 176–195, map); 'The montane vegetation of New Guinea' (Tuatara 8, 1961, p. 121–134); 'The vegetation of New Guinea' (Austr. Terr. 1, 1961, p. 21–32); H. A. HAANTJES, R. G. ROBBINS c.s.: 'Lands of the Goroka-Mount Hagen area, Territory of Papua and New Guinea' (Land Res. Ser. no 27, 1970, p. 1–159, 15 fig., 23 tab., maps).

(2) Cf. 'General report on Lands of the Wabag-Tari area, Territory of Papua and New Guinea 1960–61' (C.S.I.R.O. Land Res. ser. no 15, Melbourne 1965; vegetation description by PULLEN and ROBBINS, p. 100–113 with 16 photogr.).

(3) R. G. ROBBINS & J. WYATT SMITH: 'Dry land forest formations and forest types in the Malayan Peninsula' (Mal. For. 27, 1964, p. 188–216, 12 fig.).

(4) Cf. H. CRUM in Bryologist 62, 1959, p. 283–289; E. B. BARTRAM: 'Contributions to the Mosses of the Highlands of Eastern New Guinea' (Brittonia 11, no 2, 1959); 'Low Altitude Mosses from Northwest New Guinea' (*ibid.* 13, 1961, p. 368–380); 'Mosses of the Western Highlands of Eastern New Guinea' (Rev. Bryol. Lichén. n.s. 30, 1961, p. 185–207).

**Roberson**, see CLARK & ROBERSON.

**Roberts, Mrs D. Carson**

collected at least in *Sumatra* and *Java* (near Bandung) in 1930.

\***Roberts, O.**, see under D. W. IVES.

**Rock, Joseph Francis Charles**

Add: (d. 1962, Honolulu, Hawaii) lived for many years in China, and finally returned to Hawaii. He received numerous awards, including an honorary Dr.Sc.'s degree of the University of Hawaii.

**ITINERARY.** Add: 1916. *Philippines, Java*, and *Singapore*.—1919. Also in *Siam* (Thailand) and *Malaya*.

**BIOGRAPHICAL DATA.** Add: Newsletter Haw. Bot. Soc. 2, 1963, p. 1–13, w. bibliogr.; Taxon 12, 1963, p. 89–102, portr., bibliogr.

\***Roe, John Septimus**

(1797–1878), a lieutenant who was with Captain KING (PHILLIP PARKER KING, who surveyed the NW. coast of New Holland, 1818–22, accompanied by the botanical collector A. CUNNINGHAM),

and collected many specimens. He again visited the NW. coast of New Holland in company with Captain BREMER o/b H.M.S. 'Harcourt' and once more made natural history collections.<sup>1</sup>

**COLLECTIONS.** Several of his plants, mainly from Australia and Persia, but also from Ceylon and Prince of Wales Island (near Cape York Peninsula, N. Australia), came into the possession



R. G. ROBBINS, New Guinea, 1961

of A. B. LAMBERT and were later sold. Possibly plants from other islands in Torres Strait, S of New Guinea, were collected. Now at least in *Herb. DELESS. (Geneva)*.

**LITERATURE.** (1) Cf. HORT. S. MILLER in Taxon 19, 1970, p. 537–538.

\***Roeby, H. C. J.**, see Boswezen Nieuw Guinea.

**Roemer (Römer), von**

Add: Collected a no 53, *Cyperus iria* L. in *Java* in 1841. A *Gomphandra* collected in the same year in *Java* in *Herb. Boiss., Geneva*.

**COLLECTIONS.** Add: No news about the identity of the collector was found. Dr F. MARKGRAF, who formerly sorted out the material for Berlin, does remember that the labels were copied by TREVIRANUS.

**Roepke**, Walter Karl Johann  
(d. 1961, Wageningen, Netherlands).

**\*Rojo, Justo P.**

of the Forestry Department, School of Agriculture, Los Baños, Luzon. From Nov. 1968 he did post-graduate work on plant taxonomy at the Rijksherbarium, Leyden, with a one-year grant. Now Chief of the Forests Products Collection Section under the Wood Technology Service, National Science Development Board, College, Laguna.

He collected with WILLIAM L. STERN (see there).

**\*Roorda van Eysinga, N. P. P. J.**

(1894, Middelburg, Netherlands; 1940, killed in battle, Loosduinen/The Hague, Netherlands), book-keeper; from 1920–23 attached to the K.N.I.L. (Netherlands Indian Army) at Magelang, Central Java. After return to the Netherlands he took up his old profession. In his spare time he studied the flora.

COLLECTING LOCALITIES. *Centr. Java*. 1920–23. Environs of Magelang, Kedu Residency. Possibly elsewhere in Java.

COLLECTIONS. Presented (1971) to *Herb. Leyden*, together with a Dutch collection partly made together with his son, P. N. H. G. ROORDA VAN EYSINGA (born at Magelang, 1920), Agricultural Engineer, and partly by the latter (1940–47). It includes also a small Swiss collection leg. J. H. ROORDA VAN EYSINGA, and some cultivated plants.

**\*Roos**

collected > 24 nos of plants in *E. Borneo* (Kalimantan), vicinity of Samarinda (1940); in *Herb. Bog*.

**\*Rosario, Romecaldo M. del**

completed a 2-year study in the U.S.A., taking a M.S. degree in botany on a thesis on North American *Asterella* (Hepat). June 1964 he was back at the Manila Herbarium. In 1968 he went once more to the U.S.A., pursuing a Ph.D. (bryology) at the University of Illinois, Urbana. He was expected to be away for three years.

Co-author of 'Philippine aquatic flowering plants and ferns' (Manila 1967), of a Bibliography of Philippine Bryology ( $\pm$  1968), and author of papers on liverworts.

COLLECTING LOCALITIES. 1961. Expedition to the *Batanes* and *Babuyan* Is (itinerary see *sub* QUISUMBING).—1964. Makiling National Park, Luzon (July).—1965. Kalanga, Mountain Prov. with P. A. CORDERO Jr.—1966. *Guimaras* I.—1967. Luzon: Dalton Pass, Nueva Vizcaya Prov. (Mar. 3–18); Banaue, Ifugao Prov. (May 11–June 11; with MENDOZA, see there).

COLLECTIONS. Mostly hepatics; *Herb. Manila*.

**\*Ross, Alan E. H.**

was appointed ecologist to the Herbarium at Lae (Mand. Terr. of New Guinea) in April 1962.

In 1957 he collected in the NGF series in Jimmy Valley, Western Highlands, near Mt Hagen, Terr. of New Guinea. In *Herb. Lae*.

**Royen, Pieter van**

Add: From 1962–65 Botanist-Ecologist at Lae, Territory of New Guinea. He left on completion

of his contract to Australia in June 1965. Since May 1967 Curator of the B. P. Bishop Museum Herbarium at Honolulu, Hawaii. Author of many papers on the New Guinean flora; engaged in writing a mountain flora of New Guinea.

The genus *Vanroyena* AUBRÉV. has been named after him.

COLLECTING LOCALITIES. Add: 1954. *Singapore* I. (Mar. 4), *Labuan* I. (8).—1955. *P. Waigao*.<sup>6</sup>—1961. *Luzon* (1 week in Mountain Prov.). *W. New Guinea*: Hollandia, Cyclops Mts, SE., S., and SW. part (May 23–Aug. 23, partly with H. SLEUMER and J. DIJKSTRA).<sup>7</sup>—1962. *Terr. of New Guinea*: McAdams Park, Kauli Creek, Wau (June 13); Lake Wanum-Wau (July 5); Oomsis logging area, Wau (July 9–11); Aiyura area (12); Wau, Bulolo area (Aug. 20–23); Keglsugl area, Lengagl Creek, Lake Aunde, Mt Wilhelm to the summit (Sept. 17–27); Edie Creek area, Wau (Oct. 9–12); Kauli Creek, Wau (Nov. 14–15); various localities around Lae.—1963. Around Lae, Umi R. area, Adzare Range, Leron R., etc.; *Papua*: Rouna Falls, Sogeri Plateau (Jan. 24–25); *Terr. of New Guinea*: Rawlinson Range and Saruwaket, W of the main ridges (Feb. 20–Mar. 2), with Mr and Mrs MILLAR, climbing Mt Enggom too; Markham R. near Bridge (Mar. 17), Lae Botanic Garden (18–22); Lae-Mumeng Plateau-Bulolo (27); Nadzap Airstrip N of Lae (Apr. 28); Adzare Range (May 4); Lae Botanic Garden; Edie Creek, Wau, Kaindi, Kauli Creek (21–25); Lae Bot. Gard. (June 6); Adzare Range (13–16); Lae to Voco Point along Solomons Sea (18); Oomsis logging area (19); Adzare Range (20); trip to Bougainville I. (June 20–July 8), on the way to and from making a trip in Gazelle Peninsula, *New Britain*; trips around Toiimonapu Plantation to Crownprince Range (June 28–July 4); *New Britain*, *Vulcan* I. between Rabaul and Kokopo (July 7), S of Kerevat (7), Matupi volcano (8);<sup>8</sup> Adzare Range and Lae Bot. Garden (15–31); Oomsis logging area to Markham Bridge (Aug. 11). Trip to Mt O'Dan (Sept. 2–9): by car from Lae to Goroka, Kundiawa, and Nondugl; northward to the Wahgi-Jimmy Divide following the Warrapuri R.; Mt Bangeta (13,500 ft).<sup>9</sup> Sarawaket Range (Nov. 1).—1964. Lae-Wau road (June 16–Aug. 4); Markham R.—Lake Wanum, Red Hill Swamp, Adzare Range, Lae Bot. Garden (Aug. 29–Sept. 9); Buzu R. (Oct. 27); Markham Point Ridge (Nov. 10 & 17).—1965. *Papua*. Trip to the Upper Vanapa Valley (Jan. 7–26), Murray Pass (Wharton Range) and Mt Albert Edward, W. summit (Mt Biota) (Jan. 7–26); Waitape-Kosipi track (7–12), Mt Kumme-Mt Amorwange track up to summit (13–17), Waitape-Murray Pass track (18–26, camp at Avios, 9000 ft), Murray Pass and Tsjidibombo-Mt Biota (22–23; 11,500 ft).<sup>10</sup>

COLLECTIONS. Add: *Herb. Lae*: *New Guinea* plants (1962–65), NGF series 15003–30178, usually in 8 or more specimens, distributed following the usual scheme, 1st set to *Leyden*, 2nd to *Brisbane*, etc.

LITERATURE. (2) Add: 'De botanische exploratie van Nieuw-Guinea in de jaren 1954 en 1955' (Schakels NNG, 38, 1960, p. 28–35, 3 fig.).

(3) Add: 'Notes on the vegetation of South New Guinea' (Noya Guinea, Bot. no 13, 1963, p. 195–241, pl. 13–16, map).



(5) Add: 'A new *Staurogyne* (Scroph.) and some Acanthaceae from New Guinea' (Nova Guinea n.s. 8, 1957, p. 129–155, fig. 1–7); 'Coombea, a new genus of Rutaceae' (Nova Guinea, Bot. no 2, 1960, p. 9–12, 1 fig.).

(6) P. VAN ROYEN: 'Vegetation of some parts of Waigeo Island' (Nova Guinea, Bot. no 5, 1960, p. 25–62, 5 fig., 5 pl.).

(7) P. VAN ROYEN: 'An outline of the flora and vegetation of the Cycloop Mountains' (Nova Guinea, Bot. no 21, 1965, p. 451–469, fig. 1, pl. 38–41).

(8) P. VAN ROYEN: 'Blanche Bay Vulcanoseres' (Trans. Papua and N.G. Sc. Soc. 1962, p. 12–15, 1 map).

(9) P. VAN ROYEN: 'Sketch of the alpine vegetation of Mount Bangeta' (Trans. Papua and N.G. Sc. Soc. 1964, p. 14–20, 2 pl.); 'The genus *Papuzilla* (Brassicaceae)' (Nova Guinea, Bot. no 19, 1964, p. 427–433, 2 fig.).

(10) P. VAN ROYEN: 'Notes on the vegetation of Mount Biota (Papua)' (Acta Bot. Neerl. 15, 1967, p. 530–534).

**RRI nos**, series of the Rubber Research Institute, Malaya.

**RSNB nos**, of the Royal Society North Borneo expeditions to Mt Kinabalu (see CORNER).

**RSS nos**, of the Royal Society Expedition to the Solomons (see CORNER).

**Rümke**, Christian Ludwig  
(d. 1964, Utrecht, Netherlands).

**Rumpf**, George E. (called Rumphius)

**LITERATURE.** (1) Add: For data on the drawings see also CL. NISSEN, 'Die botanische Buchillustration' 1951, vol. 2, p. 157–158.

**BIOGRAPHICAL DATA.** Add: H. C. D. DE WIT (ed.): 'Rumphius Memorial Volume' (Amsterdam 1959); Biologist 47, 1965, p. 42–54, 3 fig.

\***Rundi**, Masirom, see Forest Dept North Borneo.

**Rutgers**, Abraham Arnold Lodewijk  
(d. 1966, Wassenaar, Netherlands).

**Rattner**, Franz  
(d. 1961, Lunz, Austria).

**BIOGRAPHICAL DATA.** Add: Hydrobiologia 20, 1962, p. 193–201, fotogr., bibliogr.; Arch. Hydrobiol. 58, 1962, p. 244–251, portr., bibliogr.

\***Rijgersma**, Miss van  
collected a *Cyperaceae s.n.* at Bogor, Java (July 17, 1929).

\***Rijswijk**, Olga van  
(1940, Brussels, Belgium; x) studied anthropology and African Administration at the University of Witwatersrand, Johannesburg, Republic of S. Africa (B.A. 1962), and took her Ph.D. in Anthropology at the Australian National University (1967). She paid two visits to New Guinea (July–Dec. 1963 and March 1964–Apr. 1965), sponsored by the Australian National University. She studied a resettlement of the mountain Kuni people (Centr.

Distr. Papua) for her Doctoral thesis, and besides the resettlement of Nakanai peoples of New Britain.<sup>1</sup> In the latter island she stayed in Nakanai (Oct.–Nov. 1964).

**COLLECTIONS.** In addition to a full collection of Kuni artifacts, a few birds of paradise and botanical specimens were collected.<sup>2</sup> In Ethnograph. Mus., Dept Anthropol., Monash Univ., Melbourne, and part-collection at Ethnograph. Collect. (Inst. of Anatomy) Canberra. Botanical specimens (about 20) comprise dried leaves, medicinal herbs and odoriferous plants from the Central District. They are not numbered nor identified.

**LITERATURE.** (1) Author of 'The Silanga Resettlement Project' (in New Guinea Res. Bull. 10, 1966).

(2) Cf. Pac. Sc. Ass. Inf. Bull. 19, no 4, 1967, p. 13.

\***Saakov**, Dr Semen G.

(1903, Ibilissi, Georgia, U.S.S.R.; x) was educated in an Agronomical Highschool; professor, Dr of Biological Sciences in the Komarov Botanical Institute of the Academy of Sciences of the U.S.S.R., Leningrad.

He made expeditions for the investigation of tropical plants in Indonesia, Cuba, etc.

**COLLECTING LOCALITIES.** Indonesia. Lesser Sunda Islands: Komodo,<sup>1</sup> Padar, Rindja, Kode.

**COLLECTIONS.** Dried plants in Herb. Bog. Seeds and plants for cultivation in the glasshouses at Leningrad.

**LITERATURE.** (1) Author of 'On the Flora and Vegetation of the island of Komodo in Indonesia' (Botan. Zjurn. 50, 1965, p. 1185–1198, 5 fotogr.; in Russian).

**Sachse**, Frans Jonathan Pieter  
(d. 1962, The Hague, Netherlands).

**Sainuddin bin Bolhassan**, see Forest Dept Sarawak.

**Salverda**, Zeno

Add: Later he went to Surinam; in 1958 appointed Inspector Staatsbosbeheer, Utrecht.

**Salvoza**, F. M.  
Add: Author of 'Lexicon of Philippine Trees' (For. Prod. Res. Inst. Bull. no 1, 1963, 136 pp.).

\***Sam**, Patrick P., see Forest Dept North Borneo.

\***Samat**, A.  
collected mainly ferns (about 15) in Malaya, 1961–69, at least in Langkawi, and on Bt Anak Takun and Bt Takun in Selangor.

\***Samsuri bin Ahmad**  
(1936, Singapore; x), Plant Collector at the Singapore Botanic Gardens since 1968.

**COLLECTING LOCALITIES.** 1962. Malaya: Accompanying BURTT & WOODS to Bt Choping (Apr. 23–27), Bt Bintang (28), and from Apr. 29–May to P. Langkawi, Dayang Bunting, G. Raya, Telaga Tujoh. With UNESCO Limestone Expedition to Bertam, Gua Musang, Gua Panjang and Ulu Kelantan (July 22–Aug. 20). G. Jerai (Nov. 9–13), G. Pulau (24); G. Ledang (Dec. 2–9).

—1964. *Sabah* (N. Borneo): Mt Kinabalu, joining the Roy. Soc. Expedition (see CORNER and CHEW WEE LEK) (Jan.–May).—1965. *Malaya*: G. Rapet, Tambun limestone, G. Pondok, Batu Tukang, Kp. Golok, Gua Puteri, led by CHIN SEE CHUNG of the Univ. of Malaya (Mar. 9–14); with H. SINGH in Maxwell's Hill areas in Taiping (May), *Penang* Hill area (15–17). *Sarawak*: G. Matang and Niah Cave with A. G. ALPHONSO (May 31–June 9).—1970. *Malaya*: Sg. Juasseh, Labis, with HEASLETT (June); G. Panti & Sg. Panjang, Labis (July); Sg. Chabang Dua, Labis (Sept.); Jalan Mersing,

**Santos, José Vera**  
retired in February 1973 and plans to accomplish his projects on botanical research.

**\*Sanusi bin Sarih**  
collected in *Malaya* at least in 1963, 1965 (Taiping, Perak), and with Dr P. GRUBB in *Johore* (Sept. 20–25, 1970) orchids from G. Belumut (Sept. 28).

**\*Sanusi bin Tahir**  
collected in *Sarawak*, at least in 1957.

**\*Satake, Yoshisuke**  
(1902, Yuzawa-machi, Akita Pref., Japan; x), botanist, graduating from the University of Tokyo (1928), taking his D.Sc. in Tokyo in 1937. Curator of the Nat. Sci. Mus. Tokyo 1939–67.

He collected in the Napan District, Vogelkop, *W. New Guinea*, March–May 1943.<sup>1</sup> His party included S. IJIRI and T. NIIMURA (see there).

The palm genus *Satakentia* H. E. MOORE has been named after him.

**COLLECTIONS.** In *Tokyo Sci. Mus. Herb.*: about 700 sheets of flowering plants and ferns.

**LITERATURE.** (1) Y. SATAKE: 'Journal of Researches in West Irian' (1943). In Japanese.

**Saunders, John Campbell**

**ITINERARY.** Add: 1957. Central Highland.—1958. Lower Ramu River.—1959. Lower Sepik R.—His last collection in 1962 in Central District, *Papua*.

**\*Saurwalt, F.,** see Boswezen Nieuw Guinea.

**Sauveur, Emile Gaston**

Add: He was in the employ of Netherlands Indian, later Indonesian Forest Service. He was in *Java*, *Borneo* (Pleihari, 1965), *W. Sumatra*, and *Timor* (coll. no 111 near Oesau, Nov. 2, 1960). On leave in the Netherlands in May 1970, after which he returned to Indonesia. In the years 1971–73 he collected plants in the Jalimo Valley, east of Baliem, *West New Guinea* (*Irian*), partly together with G. SINKE; numbered from 2500–2707.

**\*Sayers, C. David**

former staff-member of the Herbarium of the Division of Botany at Lae, Territory of New Guinea. He was seconded to the British Museum–Newcastle upon Tyne University Expedition,<sup>1</sup> to make a dried collection of flowering plants and to collect plants of horticultural interest both for the tropical Botanic Gardens at Lae and for scientific collections in the U.K. of an unknown part of the Finisterre Mountains.

**COLLECTING LOCALITIES.** 1963. See *sub* HARTLEY.—1964. *Terr. of New Guinea*: reconnaissance into the foothills of the Finisterre Range with E. E. HENTY; in Aitapa Subdistr. (Sepik Distr.) (May); *SE. Papua*: near Abau (Apu); Saidor subdistr. (Madang Distr.) and Mt Wilhelm, Keglsugl (Aug.); Edie Creek (Sept.). *Terr. of New Guinea. British Museum–Newcastle upon Tyne University Expedition*, to the Finisterre Mountains (end Sept.–Dec.):<sup>1</sup> from the Markham–Ramu River divide at c. 1000 ft up to the Naho (Gusap)



SAMSURI BIN AHMAD

Kluang (Oct.).—1971. Ulu Sg. Punkin, Lesong F. R., SW. Pahang with WHITMORE (Feb. 16–20).—1972. With HEASLETT to Ulu Sg. Segamat, G. Chabang Tiga, G. Besar (Feb. 17–22); *P. Tioman*, Bt. Penak (Sept. 17–18); with HEASLETT to G. Panti East (Oct. 18).—1973. With DRANSFIELD and HEASLETT to G. Panti East (Jan.).

**COLLECTIONS.** *Herb. Sing.*: > 792, with his own serial numbers. Dupl. distributed to Kew, *Leyden*, *Arn. Arbor.*, *Lae*, etc.

**SAN nos,** see Forest Dept North Borneo.

**Sanchez, Mateo**

Add: Jesuit priest and graduate student in botany.

**Sanderman Olsen, Sv.-E.,** see *sub* OLSEN.

**\*Sands, Martin J. S.**

B.Sc. (1959), from Kew, accompanied Dr A. C. JERMY (see there) on an expedition to *Central Celebes* and *S. New Ireland* at the end of 1969. Especially charged with the collecting of *Begonias* and other phanerogams. Living material?

R. to the highest point of the ridge on Mt Abilala (11,320 ft), proceeding on foot via Daimandi, Budemu (4200 ft), Moro (5200 ft), Sewe, Lake Naho (8700 ft), Freybourg Pass (9600 ft), summit (11,300 ft).—1965. With the 3rd part of the expedition to Wagau and the Herzog Mts (Jan.); Morobe District (Feb.); *New Britain: Fullerton Harbour* (Feb.).

**COLLECTIONS.** Numbered in the NGF series, but partly in the series of T. G. HARTLEY. In *Herb. Lae* and elsewhere.

**LITERATURE.** (1) A. C. JERMY & C. D. SAYERS: 'An Expedition to the Finisterre Mountains of Eastern New Guinea' (J. R. Hort. Soc. 92, 1967, p. 117–128, fig. 54–55, 57–63, 1 map). See also *sub* JERMY.

**Schadenberg, Alexander V.**

**LITERATURE.** (1) Add: Ethnological papers in *Zeitschr. f. Ethnol.* 1880 and 1885.

**Schebesta, Rev. Father Paul**

Add: (1887, Gross-Peterwitz, Austria; x) was educated at the Mission Seminary St. Gabriel at Mödling near Vienna; Dr. Phil. of the University of Vienna. From 1912–16 missionary in Portuguese East Africa. Because of World War I he was interned and stayed from 1916–20 in Portugal. In 1924–25 he stayed for 20 months in *Malaya, Sumatra*, and Siam (Thailand); in 1929–30 and 1934–35 for respectively 20 months and a year with the Ituri pygmies in Africa; in 1938 for 8 months in the *Philippines and Malaya*; in 1946 and 1954 two expeditions to the pygmies. He is a member of the Anthropos Institute, member of the board of the Africa Institute, and honorary member of the London Anthropological Institute, etc.

In 1967 he stayed in the Mission Seminary at Mödling.

Author of numerous other books, including 'Tanah Malaya' (Wien 1960).

**LITERATURE.** (1) Add: a.o. in *Peterm. Geogr. Mitt.* 72, 1926, p. 253–257, map.

**BIOGRAPHICAL DATA.** By courtesy of the Dutch Radio Broadcasting on Mission Work.

**\*Schiefenhövel, Wulf**

(1943, Siegen/Westfalen, Germany; x) medical student (1963–65 Munich University) was in E. New Guinea as a member of a small scientific expedition conducted by Dr TH. SCHULTZE-WESTRUM, zoologist at Munich,<sup>1</sup> in 1966. His interest was native medicine.

After his return in Germany he continued his study at the University of Erlangen.

**COLLECTING LOCALITIES.**<sup>1</sup> 1966 (Jan.–Sept.). *E. New Guinea, Papua:* delta Kikori River in the Gulf of Papua, based at Aird Hill (4 months, Jan.–Apr.); lower reaches of St. Joseph R., N of Yule I., Centr. Distr., based at Maria Era Plantation near Epo (2 months); *Terr. of New Guinea:* 15 km NNW of Mt Bosavi, Western Highlands Distr., based at Bosavi Station near Didessa (1 month).—1970. *Papua and Terr. of New Guinea* (July–Dec.).

**COLLECTIONS.**<sup>1</sup> 150 medicinal and other useful plants in the course of his work on the medical knowledge and practice among the indigenes of

New Guinea; material obviously mostly sterile. Many fragmentary and sterile suitable specimens in *Herb. Lae*.

**LITERATURE** (1) Cf. *Fl. Mal. Bull.* no 22 1968, p. 1540; TH. SCHULTZE-WESTRUM: 'Ergebnisse einer zoologisch-völkerkundlichen Expedition zu den Papuas' (*Umschau in Wiss. u. Techn.* 68, 1968, p. 295–300, map, 6 fig.); 'Neuguinea (Papua-Urwelt im Aufbruch)' (Kummerley & Frey, Bern).

W. SCHIEFENHÖVEL: 'Medizinmann, Magier und Arzt' (*Zeitschr. f. Mediz. Stud. & Assist.* 1, 1969, p. 20–24, 7 fig.; *not* botanical).



Y. SATAKE, June 1967

**\*Schierbeek, Abraham**

(1887, Leeuwarden, Fr., Netherlands; x), biologist, educated at Groningen University (1906–12), where he took his Dr's degree in 1917. From 1910 teacher in natural history in secondary schools, from 1912 onwards in The Hague; he lectured at Leyden University in didactics and later also in the history of biology, 1927–53.

He was enabled to visit the Dutch East Indies as a 'Deterdinger', sent out by the Jan Pietersz. Coen Society (Amsterdam). He wrote numerous small popular papers on his travel impressions.

Editor of 'Alle de Brieven van A. v. LEEUWEN-HOEK' (The Collected Letters).

**ITINERARY.** 1931 (2nd half). He visited: *Sumatra East Coast:* Medan and north of it, G. Sibajak; *Java,* E of Batavia, G. Bromo (Oct.), *Billiton, Bali, and Madoera.*

**COLLECTIONS.** For the main part Sumatran tobacco weeds presented to him by Dr S. J. C. JOCHEMS. Not numbered. In *Herb. Leyden*.

**Schierbrand**, Wolf C. von

Add: (1807, Bautzen, Germany; 1888, Dresden, Germany), Colonel, with the Royal Engineers from 1853-?; honorary member of the Natural History Society Isis at Dresden.

BIOGRAPHICAL DATA. De Indische Navor-scher 3, 1937, p. 94, portr.

**Schiffner**, Victor Felix

(d. 1944, Baden near Vienna, Austria).

COLLECTIONS. Add: His main cryptogam collection was bought by FARLOW *Herb.* (Cambr., Mass.).



ERWIN SCHMUTZ, 1970

BIOGRAPHICAL DATA. *Scient. Pharm.* May 1942, 2 pp.; Prof. RECHINGER in *litt.* (Nov. 4, 1970); *Fl. Mal. Bull.* no 25, 1971, p. 1878.

\***Schipp**, William A.

was on the staff of the Botanical Gardens, Darwin, Australia, at least from 1924-28; at that time probably in his forties.

He made extensive collections in British Honduras,<sup>1</sup> and previously (about 1928) collected plants in *New Guinea*, *Java*, and the *Dutch East Indies*. He came to San Francisco, Cal., from Java, late Jan. 1929.

COLLECTIONS. Through E. D. MERRILL he obtained subscribers to his herbarium sets (probably from Br. Honduras only). Many letters are present at the Univ. of California, Michigan, etc.

LITERATURE. (1) R. M. LOWDEN: 'William A. Schipp's botanical explorations in The Stann

Creek and Toledo Districts, Brit. Honduras (1929-1935)' (*Taxon* 19, 1970, 831-861).

**Schlechter**, Friedrich Richard Rudolph

COLLECTIONS. Also orchid dupl. in *O. AMES Herb.* and *Herb. Mo. Bot. Gard.*<sup>12</sup>

LITERATURE. (12) Add: P. J. B. WOODS: 'The whereabouts of Schlechter's New Guinea duplicates of *Liparis* (Orch.)' (*Not. R. Bot. Gard. Edinb.* 26, 1965, p. 361-364). W. H. LEWIS: 'Schlechter's New Guinea duplicates of *Liparis* (Orch.) at the Missouri Botanical Garden' (*Ann. Mo. Bot. Gard.* 53, 1966, p. 259-260).

\***Schmutz** S. V. D., Father Erwin

(1932, Ingolstadt/Donau, Germany; x), at first a druggist, studied theology from 1956-62, and set out for Indonesia as Steyler Missionary in Flores (Lesser Sunda Islands) in 1963.

COLLECTING LOCALITIES. From 1964 onwards in W. Manggarai, *Flores*.—1968. Trip to *Timor* (June-Aug.): Atapupu (June 14), Atambua, Atapupu (16) (Kolo Guerita), Mota Buik (river between Atambua and Nenuk Lalina), Lahurus (20), ascent of the Laka'an (1585 m; 21) and descent on the W. slope: Mota Oé (river; 25); Lalian Nenuk and Mota Telau (25), Kefamenanu (28), Tua Mésé, direction Mutis to Oeolo (700 m; 30); ascent G. Mutis (July 3-4; 2427 m); Soé (10; 1200 m) and Nikiniki (12; 750 m); from Soé to Kupang (14); to *Roté* (= Roti) (17-20); return to Kupang (staying 27-Aug. 2); to Maumere by plane (Aug. 4); *Centr. Flores* (Aug. 8-30), visiting *Lomblem* (= Lomblen) (13); return in *W. Flores* (Aug. 31).

COLLECTIONS. Private herbarium; originally ferns only (1964: nos 01-0116; 1965: nos F1-F143), subsequently phanerogams and mosses also (1965-67: nos 1-1588). All specimens at least with one duplicate which is intended for *Leyden Herb.* (pres. 1970). Several of the numbers are lacking. *Garcinia* specimens were sent to Dr KOSTERMANS at Bogor (Indonesia). In 1974: 3200 nos.

**Schneider**, Gustav

Add: (d. 1958, ?Basel, Switzerland). In 1888 he visited Sumatra for the first time, accompanying the geologist and Director of the Zoological Museum Zürich, Prof. C. MÖSCH. He got his training at the Zoological Institute at Basel, but was later custodian of the musea at Kolmar and Mülhausen. He traded in natural curiosities, and lived at Basel. In later years he visited the U.S.A. and the Bermuda Islands.

LITERATURE. (1) Add: 'Die Orang Mamma auf Sumatra' (*Vierteljahrsschr. Naturf. Ges. Zürich* 103, 1958, p. 213-286).

BIOGRAPHICAL DATA. *Vierteljahrsschr. Naturf. Ges. Zürich* 103, 1958, p. 215-216, portr.

\***Schodde**, Richard

(1936, Adelaide, S. Australia; x) was educated at the University of Adelaide, graduated with B.Sc. Hons in Botany in 1961. Between 1958-59 he worked in the State Herbarium of S. Australia, and since April 1960 he was appointed systematic botanist with the Division of Land Research and Regional Survey, C.S.I.R.O., Canberra, Australia.

In 1967 he was working for a Ph.D. on *Monimiacae* in Adelaide; author of papers on Papuan botany. Later he resumed his work at Canberra, and about 1970 joined the Wild Life section of C.S.I.R.O. as an ornithologist.

**COLLECTING LOCALITIES.** 1960. *Mand. Terr. of New Guinea*: with R. D. HOOGLAND in Morobe Distr.: Labu swamps near Lae (June 15), Zenag Hill (16); Western Highlands Distr.: vicinity of Tchak and Tale River valleys, near Wapamamanda (23–July 10), Mount Sugarloaf grassland area (11–24), vicinity of Kepilam, Lagaip valley (30–Aug. 13), Yobobos, headwaters of Lagaip River (16–Sept. 7).—1961. *Neth. New Guinea*, Central Range: Wamena (Baliem valley) to foot of Wilhelmina Top. c. 13,000 ft,  $\pm$  via Wamena River valley (June 1–8). *Papua*, Southern Highlands Distr.: vicinity of Kiburu, near Mendi, c. 5500–6500 ft (June 26–July 9), Mendi, 5200 ft and Dimifa, 7200 ft (June 27), Ebenda, SW. foot of Mount Giluwe, 6500–7000 ft (July 16–28), SW. slope of Mt Giluwe, 8500 ft (Aug. 3), western summit grasslands of Mt Giluwe (Aug. 7–23; 26), western slopes of Mt Giluwe above Karel, 8300–9100 ft (25–Sept. 2), Enep-Dimifa, 7100 ft (Sept. 7), around Lake Kutubu,<sup>1</sup> c. 2500–3000 ft (16–Oct. 9).—1962. *Papua*: Brown River area near Port Moresby (July 1–31), Rigo area (Aug. 6–17), Sogeri plateau (Aug. 27–Oct. 1).—1964. *Solomons*: Bougainville (July 16–Sept. 23).—1966. *Papua*: Gulf Distr. (Jan. 9–Mar. 18); Aseki area, Kuku-kuku ranges, Morobe Distr. (Mar. 31–Apr. 29), with L. A. CRAVEN.—1969. Owen Stanley Range and Mt Wadimana (E. summit Simpson massif), middle of the year.—1970. With A. KANIS in *Papua*: Astrolabe Range and near Efogi on the Kokoda Trail.

**COLLECTIONS.** With HOOGLAND in the NGF series (1960), *Herb. Lae*; c. 1150 nos (1306–2456) in *Herb. Canb.* (C.S.I.R.O.), dupl. distributed as those of HOOGLAND.<sup>2</sup> Wood-samples with the Div. of Forest Products, C.S.I.R.O., Melbourne, Dept of Forests, Lae and Port Moresby, and C.S.I.R.O. Herb. Canberra. Bougainville collections ser. 3581–4131; 1966 N. G. coll. nos 4200–5090 were made with the assistance of L. A. CRAVEN. He collected in Australia and Tasmania too.

**LITERATURE.** (1) R. SCHODDE & W. B. HITCHCOCK: 'Report on the birds of the Lake Kutubu area, Terr. of Papua and New Guinea' (Div. Wild Life Res. CSIRO, Canberra, Techn. Paper 13, 1968, p. 1–73, 5 fig.).

(2) E. B. BARTRAM: 'Mosses of the Western Highlands of Eastern New Guinea' (Rev. Bryol. Lichén. n.s. 30, 1961, p. 185–207).

#### \*Schönian, W.

of Bremen, Germany, made a geological expedition in NW. New Guinea in 1929. At least part of his plant collection in *Herb. Berl.* where special labels were printed 'Gr. Gellvink (= Geelvink)-Bai, Berge südl. von Nabire Trop. Urwald; 100–400 m' (Acc. 10.1.1944).

#### Schol-Schwarz, M. B.

(d. 1970).

**BIOGRAPHICAL DATA.** Jaarb. Versl. & Meded. Kon. Ned. Bot. Ver. over 1969, 1970, p. 6.

\*Schouten, see sub J. J. LOETERS.

#### Schram, Ferdinand August Willem

Add: He helped as field assistant during part (Oct.–Dec. 1961) of the 2nd Rijksherbarium New Guinea Expedition (see SLEUMER).

*Diplycosia schramii* SLEUM, has been named after him.

**COLLECTING LOCALITIES.** Add: 1958. Beriat and Wersar, near Teminaboean (Apr. 18–May 5);



SCHODDE

Ajamoera area (Ajamoera, Semoe, Jokwer, Kamboeaja, Djitmao, Fan, Tehagh, Aitinjo, Erokwer, Jokoro, Awit, Ewai, Mos, Kami, Itaro, Koa, Teminaboean, Skendi) (May); W. part of Arfak Plain (Sidei, Wariki) (July–Aug.); Kebar Valley (Anisandau) (Oct.–Nov.).—1959. Sarmi Hinterland (Kwansem, Sidoeari Mts, Oereb R., Abenti, Kondirdjan) (May 12–June 18); *Biak I.* (Karadori, Masi) (Nov.–Dec.).—1960. Sekoli Plain (Feb.–Mar.); Wissel Lakes (May 11–30, see VINK); *Japen I.* (Seroci, Randawaja, Soemberbaba, Aisao, Soemberbaba, Seroci) (Sept. 20–Oct. 10).—1961. Warsamson Valley, E of Sorong (July 16–Aug. 24).—1962. Wandammen Peninsula (Wondiwoi Mts, Wasior) and *Job I.* (Feb. 24–Mar. 30): *Meos Noem* (July 31–Aug. 11).—1958–62. Surroundings of Manokwari.

**COLLECTIONS.** Add: About 2600 nos.

#### Schultze Jena, Leonhard

(d. 1955, ?, Oberhessen, Germany), from 1913–1937 Ordinary Professor of Geography at the Philipps-Universität, Marburg. When retired he devoted himself to the study of Mexican and

Central-American cultures (information courtesy Marburg University).

**\*Schuurman, Jan Albert**

(1888, The Hague, Netherlands; x), a garden enthusiast, was for many years in the employ of, the Dutch Foreign Service; he practised gardening in Canada, Louisiana, Netherlands, Java and Brisbane. From 1949–55 he lived at Djakarta (Indonesia), teaching at the Indonesian College for Foreign Affairs. After a short visit to Holland,



SCHRAM

he returned to Java, giving radio talks for Radio Indonesia and making himself useful in the Herbarium and Botanic Garden at Bogor.

He translated popular botany books in English and wrote papers in horticultural magazines.

Since 1959 settled near Brisbane in Australia.

**COLLECTIONS.** No 137, *Otophora spectabilis*, coll. 29-7-1957 in *Hort. Bogor*. In *Herb. Bog.*; several dupl. distributed.

**Scott, J.**

(see Suppl. Cycl. Fl. Mal. I, 5, 1958) might be JOHN SCOTT, officer in the employ of the Hon. United E.I.C.; he sailed in the 'Admiral Gardner' to Bengal and Bencoolen in Sept. 1797, and in the 'Lord Duncan' by the end of March 1801.<sup>1</sup>

**LITERATURE.** (1) Cf. CH. HARDY: 'Register of Ships employed in the service of the Hon. United E.I.C. etc.' (London 1799) p. 92, 111.

**Seemann, Bert(h)old Carl**

**LITERATURE.** (1) Add: For the itinerary in Alaska see Bot. Not. 1940, p. 300–301.

(2) Add: For dates of publication, see W. T. STEARN in J. Soc. Bibliogr. Nat. Hist. 4, 1963, p. 151–152.

(4) Add: For details on the drawings see CL. NISSEN, 'Die botanische Buchillustration' 1951, vol. 2, p. 169.

**BIOGRAPHICAL DATA.** Add: In HEMSLEY & HOOKER, Biol. Centr.-Amer. 4, 1887, App. p. 132.

**\*Selveraj, P.**

Assistant of the Forest Research Institute, Kepong.

**COLLECTING LOCALITIES.** *Malaya.* 1968. Perak, G. Bubu (Aug. 27–30).—1969. G. Bubu (June 17–20); Trengganu, G. Tebu F. R. (July 6–8).

**Semper, Carl Gottfried**

**LITERATURE.** (1) Add: On publication dates of the (zoological) scientific results, cf. J. Soc. Nat. Hist. Bibl. 5, pt 3, 1969, p. 144–147.

**Serrurier, Dr Cornelia**

will be M. C. SERRURIER (see Cycl. Fl. Mal. I, 1, 1950), the M. probably standing for Mademoiselle.

(d. 1962, Nijmegen, Gld., Netherlands, at the age of 82). She was educated at Lausanne University and was a private lecturer on French literature at Leyden University from 1913–1934. In the latter year she settled at Nijmegen.

**\*Setchell, William Albert**

(1864, Norwich, Conn., U.S.A.; 1943, Berkeley, Cal., U.S.A.) was educated at Yale and Harvard Universities, obtaining his doctorate in 1890. Subsequently he served as Assistant Professor at Yale and in 1895 came to the University of California as Professor of Botany, retiring in 1935. His special field of interest was algology. He made two round the world tours, viz in 1903–04 and 1926–27.

He visited Java as a member of the 4th Pan-Pacific Science Congress in 1929, and evidently attended some of the excursions.

**COLLECTIONS.** General collection from Java in *Herb. Berkeley (U.C.)*. Others were made during the round the world journeys when to my knowledge the Malesian region was not visited.

Extensive collections of *Algae*.

**BIOGRAPHICAL DATA.** T. H. GOODSPEED (ed.) in Essays in Geobotany in Honor of W.A. Setchell (Un. Cal. Press 1936), with bibliogr. and portr.; Science 97, 1943, p. 458; Madroño 7, 1943, p. 91–93, portr.

**\*Seto, Ko**

pteridologist and a member of a joint expedition of the Osaka Museum of Natural History and the National Museum, Manila, in the Philippines. They collected on Mt Apo in Mindanao (Davao) from Nov. 19–Dec. 20, 1969.<sup>1</sup>

**COLLECTIONS.** Shared equally between *Osaka Mus.* and *Herb. Nat. Mus. Manila*.

**LITERATURE.** (1) Cf. Fl. Mal. Bull. no 25, 1971, p. 1891–1892.

**Shah bin Haji Mohamad Nur, Mohamad**

(1935, Singapore; x), Plant collector at the Singapore Botanic Gardens from 1956–58, subsequently Herbarium Assistant.

**COLLECTING LOCALITIES.** 1955. *Sarawak*, with PURSEGLOVE at Kuching, Batu Kitang, Bau:



Setapok and Sebanding, G. Gading, Lundu, Sematan, Kp. Pueh (Sept. 12–27).—1956. *Sarawak*, with PURSEGLOVE and GILLILAND to Bako National Park, Telok Asam, Telok Tajor, Lokosan, Sg. Serai, Telok Wakang, Telok Delima, Telok Lakei, P. Lakei, Telok Limo (May 16–22); Sana, Sg. Tau, Sg. Mayeng (Tau Range), Bt Mayeng, Bt Mersing, Tatau, Bt Buan (May 28–June 20).—1957. *Malaya*: Batu Berendam (May 6–9); Jenderam Estate near Nilai (Sept. 18–23).—1958. Sabai Estate near Bentong (Jan. 26–Feb. 3); Bukit Paloh Estate (Apr. 2–9).—1959. With H. M. BURKILL day-trip to Kota Tinggi (Feb.); with KADIM BIN TASSIM to Kp. Gobek (Feb. 28–Mar. 8); Fraser's Hill and Pine Tree Hill with H. M. BURKILL and MOHD. NOOR (Aug. 24–29).—1961. *Sabah*: With the Roy. Soc. Expedition to Mt Kinabalu (see CORNER and CHEW WEE LEK) (May–Aug.).—1964. With Roy. Soc. Expedition to Mt Kinabalu (Jan.–Apr.).—1965. *Malaya*: G. Hijau in Maxwell's Hill, Bt Berapit, Bt Kemunting and Batu Hampar in Taiping (Dec. 3–9).—1968. With WHITMORE to Taman Negara, Kuala Tahan, Sg. Teku, Sg. Tahan, G. Pondok II, G. Tuan Sket, Jeram Panjang, Kuala Keniyam, Bt Keliyu, Gua Luas, Bt Terom, Sg. Redap & Sg. Belar (Feb. 16–Mar. 10).—1970. Sg. Bantan, Labis F. R., with HEASLETT (May). With WHITMORE and MOHD. NOOR in Taman Negara: Ulu Sg. Sat, Ulu Sg. Sepia, Kuala Aur, Jeram Perahu, NW. Tanjong Bungkal (July); Ulu Sg. Sedili Kechil, Bt Tangga Tujoh, with R. HILL (Aug. 17–19); Jalan Mersing, Kahang, G. Blumut with GRUBB (Sept. 19–27).—1972. With WHITMORE to G. Rabong, Ulu Sg. Ketil (Mar. 7–19).—1973. Gua Musang, Sg. Ketil, Sg. Kundor (Jan. 29–31); Bertam, G. Brangkat, G. Brong, Gua Brong, Bt Bang in Kelantan (Feb. 1–8).

COLLECTIONS. *Herb. Sing.*: > 2800, in his own serial numbers. Dupl. to Kew, Leyden, Arn. Arbor., Lae, etc.

**Shelford, Robert Walter Campbell**

Rightly: d. at Margate, England.

BIOGRAPHICAL DATA. In Bibliogr. Austr. Entom. 1775–1930, 1932.

**\*Shimizu, Tatemu**

(b. 1932), a member of the *Kyoto University Biological Expedition to Thailand and Malaysia, 1967*. He paid special attention to the limestone flora.

ITINERARY. See *sub* K. IWATSUKI.

COLLECTIONS.<sup>1</sup> 1st set in *Herb. Kyoto*; 2nd set in *For. Herb. Bangkok*.

LITERATURE. (1) Elaborated in 'Contributions to the Flora of Southeast Asia' in *Tonan Ajia Kenkyu* (The Southeast Asian Studies) vol. 8, no 2, 1970, and more to come.

**Siberg**

(*cf.* Fl. Mal. I, 1, 1950, p. 484b) must have been JO(H)ANNES SIBERG (1740, Rotterdam, Netherlands; 1817, Batavia, Java), who sailed to Java as gunner's mate in 't Hof Duna', Zealand Chamber of the East India Company, in 1758. At his arrival he resigned and had a long career with the Company. As a Senior Merchant (1776) he was sent to Padang, Sumatra West Coast. In 1780 he returned

to Java, held several high offices, finally as Governor General (1802–05).

He was hot-tempered, ambitious, and unreliable. His marriage to a daughter of Governor-General Alting might account for his reaching the top. After his resignation he stayed at Batavia and still had a considerable influence for many years.

BIOGRAPHICAL DATA. F. W. STAPEL: Gouverneurs-Generaal van Nederlandsch-Indië' (Den Haag 1941, no xxxiii, w. portr.).



MOHAMAD SHAH

**\*Sidek**

collected with SHAH and PURSEGLOVE (see there) in the *Malay Peninsula and Sarawak (1957)*. Plants in *Herb. Sing.*; dupl. a.o. in *Herb. Edinb.*

**\*Siebenhaar, W. E. F.**, see Boswezzen Nieuw Guinea.

**\*Sikajat**, see Forest Dept North Borneo.

**\*Silva, K.**

collected at least 10 plants on *Lou Island* (Feb. 1962), near Manus, *Terr. of New Guinea*. In *Herb. Brisb.*

**\*Sim**

biologist of Bandung University, accompanied KOSTERMANS to NE. Kalimantan.

**\*Simeon, M.**, see Forestry Bureau, Manila.

**Simmonds, N. W.**

Add: Author of some books on bananas.

**\*Simonett**

collected *Nothofagus flaviramea* STEEN., no 69, at Chimbu, *E. New Guinea*.

\*Sinanggul, H. T., see Forest Dept North Borneo.

**Sinclair, James**

(d. 1968, Kirkwall, Orkney, N of Scotland)  
Add: He retired by Dec. 31, 1962, by compulsion of the Malayanisation scheme, but continued his work on a contract with the Singapore Government in an honorary capacity, till he left Singapore in May 1967.



SLEUMER

**COLLECTION LOCALITIES.**<sup>4</sup> Add: **1957.** *Malaya:* Malacca (Apr. 20–21); *N. Borneo:* Sepilok, Sandakan (June–July); *Malaya:* Mersing (Dec. 4–5).—**1958.** Japan (May 13–16); *Philippine Islands, Luzon* (May 21–July 5), partly with EDANO; *Malaya:* Selangor, Perak and Cameron Highlands (Oct. 7–Nov. 5).—**1959.** *W. Java:* Bogor (Feb.–Mar.), visiting Udjong Kulon, *P. Handeuleum Sisi*, and *P. Peutjang* (4 days), G. Salak, Tjibodas, also collecting in *Hort. Bog.*; *Malaya:* Pahang, Johore, Kelantan, Perak.—**1960.** *NW. Borneo* (Aug.–Sept.): *Sarawak* (3 weeks from July 31), and *Brunei* (2 weeks).—**1962.** *Malaya:* Selangor (Nov. 12–20).

During the years 1949–Feb. 1967 numerous one-day trips in Johore, and Singapore.

**COLLECTIONS.**<sup>4</sup> *Herb. Sing.*: including 416 nos from Borneo 1957, and 374 nos from Borneo 1960. His own series runs to 10922, the last number dated Feb. 25, 1967. In Singapore he originally numbered in the SFN series, but when he had sufficient duplicates, one was laid aside for his private herbarium and given a number in his own series too. In some of his papers certain specimens are cited by both numbers. The SFN series was discontinued in 1959. Many dupl. from Singapore in *Herb. Edinb.*

**LITERATURE.** (4) H. N. BURKILL gives 'A summary of all Sinclair's collecting in Asia, Singapore excepted', in *Gard. Bull. Sing.* 23, 1968, p. xx–xxiii.

**BIOGRAPHICAL DATA.** *Gard. Bull. Sing.* 23, 1968, p. i–xxiii, pl. 1–3, incl. bibliogr., list of Sinclairan taxa, summary of collecting, portr., facs.; *Fl. Mal. Bull.* no 23, 1969, p. 1671–1672.

**Singapore Botanic Garden**

The SFN series was discontinued from Jan. 1st, 1959, and had been in declining use for some years.

\*Singh, Hardial

botanist of the Singapore Herbarium, collected together with ANG GEK CHOO and SAMSURI BIN AHMAD (see there) in 1965; Selangor (15–26 Jan. 1966), Johore (Nov. 21–26, 1966). In 1970 on study leave at the University of Hawaii.

\*Singh, J., see Forest Dept North Borneo.

\*Sinke, Guljaam

(1945, Driewegen, Zld, Netherlands; x) attended the Horticultural School at 's-Hertogenbosch (Br.), and went to Irian in October 1970 on behalf of the Board of Mission of the Netherlands Reformed Church (in co-operation with the Rhinish Mission). He is stationed at Angguruk in the Jalimo Valley.

**COLLECTING LOCALITIES.** 1971–73. *West New Guinea (Irian):* Jalimo Valley, east of the Baliem.

**COLLECTIONS.** *Herb. Leyden.* Partly with SAUVEUR (see there) in his series 2500–2707, and 65 nos with his own numbers.

**Skottsberg, Carl Johan Fredrik**

(d. 1963, Göteborg, Sweden).

**BIOGRAPHICAL DATA.** Add: *Hawaiian Newsletter* Oct. 1963, p. 99–100; *Adansonia* 3, 1963, p. 310–312; *Taxon* 13, 1964, p. 1–7, bibliogr. (onwards of 1940), portr.; *Proc. Linn. Soc. Lond.* 175, 1964, p. 189–190; *Biogr. Mem. Fellows R. Soc.* 10, 1964, p. 245–256, portr., bibliogr.

\*Sleumer, Hermann Otto

(1906, Saarbrücken, Germany; x) was educated in pharmacy in Munich, and subsequently studied botany and geology (Ph.D. Freiburg 1932). In 1933 appointed Assistant in the Berlin Museum, and since 1946 Professor of Taxonomical Botany and Plant Geography at Berlin University, giving courses in pharmacognosy also. In 1949 to S. America as Extraordinary Professor at Tucuman (Instituto Miguel Lillo). Since mid-1953 on the Foundation Flora Malesiana staff at Leyden and from July 1956 on the staff of the Rijksherbarium; he retired March 1971. Specialist in *Ericaceae*.

With Dr P. VAN ROYEN he made an expedition to New Guinea in 1961–62.

**ITINERARY.** 2nd *Rijksherbarium New Guinea Expedition, 1961–62.*<sup>1</sup> Travelling by way of Luzon, collecting (May 6–21) with Mrs M. L. STEINER on Mt Santo Tomas, Mt Data National Park, along the road to Bontoc-Banaue, and on Mt Polis. *Dutch New Guinea*, with P. VAN ROYEN, and J. DIJKSTRA of the For. Service: *Cyclops Range*, base camp at Ifar (c. 380 m; May 31–Aug. 28), making 5 major trips: to Ormoe with camps at the Faita R. (c. 990 m), below the saddle (c. 1220 m) on the S. slope, and to the highest summits in the central part (Mt Rara, 1700 m; Mt Raveni, c.

1880 m), between June 6 and July 5; in the W. part as a transect from Dozai *via* Baimungun creek (and Mt Dafonsero, c. 1570 m) to Tablasufa—Cape Tanahmerah, and back to Dozai (July 29–Aug. 8); in the E. part 2 ascents from Kotanica resp. the Kujabu R. on the S. slopes of Mt Makanoi up to 800 m (July 17–23, resp. Aug. 16–19); numerous minor trips from Ifar into the lowlands on the S. side of the Cyclops Range on to Sabron and Depapre, along Lake Sentani, around Ifar, Kemiri, Kotanica, along the Jabau and Kujabu rivers, and near Hollandia (Pinksterbivak, Skyline, Base G), up to Aug. 28. After the departure of Dr VAN ROYEN (see there) to Lae in the *Territory of New Guinea*: with J. S. WOMERSLEY collecting in the Bulolo area (Edie Creek, Merri Creek, Mt Kaindi (c. 2200 m) and several miles along the old army road from Edie Creek to Bulldog (Aug. 30–Sept. 3), and around Marafunga (2400–2500 m) near Goroka (Sept. 5–8); alone visiting Kundiawa and the Upper Chimbu R. valley up to Dengalagu (= Toromambuno, 2280 m) Mission Station (9–11), climbing the E. slope of Mt Wilhelm *via* Pengagl Creek (12), staying near Lake Aunde (c. 3350 m) up to Sept. 16, collecting up to c. 3800 m (mainly *Ericaceae*); from Sept. 17–22 lower part of the ascent near Keglsugl and along Pengagl Creek up to c. 2800 m. By air returning to *Dutch New Guinea*: Manokwari (25); base camp at Andjai (from Oct. 6), Kebar Valley, for the 2nd part of the expedition, making minor trips on the Kebar plain and into the lower part of the mountain (Mt Tobin-Nertoi area, Mt Netti, up to c. 100 m); *via* Amboaki R. bivouac to Soeroerem on the Aifat R. (2nd base camp), from where VAN ROYEN, and F. SCHRAM (of the For. Service) along the northern foothills of the Tokiri Range, the Aifat R. and the Ischon R., exploring Mt Kusemun (1400 m) in the central part of the W. Tamrau Range, returning to Andjai on Nov. 16; SLEUMER collecting on the crest of the E. part of the Tokiri Range (1250 resp. 1400 m), Sept. 30 marching along the Aifat R. westwards to the Waumi R., ridge W of and parallel to the Waumi R., and from a transitory camp at 1420 m to the waterdivide in the E. part of the Tamrau Range (Wamsuf massif) at c. 2100 m (Nov. 2); back at Soeroerem, camping on the N. flank of the E. part of Tokiri Range at 1100 m, reaching the summit (c. 1550 m) on Nov. 8; return to Andjai for a short period of rest; camp on the S. shoulder of Mt Netti at c. 1750 m (Nov. 27); climbing the crest of the Netti Range both to the W and E up to 2100 m, marching over the top (c. 1950 m) (Dec. 3) towards the Wekari R. (c. 1550 m, staying 2 days in the resthouse); finally to Andjai (Dec. 6 and 7); various minor trips from Andjai to the Kebar Plain and adjacent mountains up to 1000 m opposite Andjai; Dec. 21 by plane to Manokwari (staying 21–29), and return of VAN ROYEN to the Netherlands; with W. VINK (see there) flown from Ransiki to Lake Angi Gita resthouse 'Noordpool' (1840 m) on the Arfak Range (Jan. 8–9 1962), collecting in the marshland, slopes, especially the N. slope of Mt Mesenuk (along the so-called Lulofspad) up to the top (c. 2150 m; 9–11); to Testega on the opposite side of the lake; Mt Mongremotti (2180 m) and return to Testega; ascent to the range between Lake Angi Gita and

Lake Angi Gigi, called Koëbré (or Kobre-mot, 2300 m) and Tembrok (2400 m) on Jan. 14; 2nd ascent of Mt Koëbré (16), descending to the village Ukdehot-mamot (2100 m) and Surerei on Lake Angi Gigi (1920 m); from there exploring Mt Senseenemes (18, up to 2600 m), and *via* the SE. slope up to the summit (20); Mt Gwamongga (21, to the top, 2570 m); *via* the Sikohirie (2200 m) and the villages Tridaga and Siskado to Iray (22); from there making several trips, e.g. *via* Tidjei to the NE. part of Koëbré ridge up to 2430 m (24), returning *via* Disrebei; to Mt Saru-mot (2350 m, 26), Mt Tembrok *via* Tidjei and Koëbré up to 2510 m (28); by helicopter from Iray to Manokwari (29); Feb. 7 by helicopter with ZIECK (see there) to a camp above the Warjori R., collecting on an almost inaccessible ridge and steep slope; leaving Manokwari (9) and returning *via* Lae, Australia, Hawaii and the U.S.A., arriving at Amsterdam on March 21.—1963.<sup>2</sup> In June some days in the Cameron Highlands (*nos* 4661–4675), *Malaya. N. Borneo*: Mt Kinabalu (July 25–28) and the Mesilau R. up to 2250 m (July 19–25), accompanied by Mrs COLLENETTE, Dr H. P. FUCHS (Shell Co. The Hague), and Dr W. MEIJER; *Sarawak*: Mt Matang (July 30–Aug. 1). Thailand (Aug. 15–Sept. 11; numbered SLEUMER & SMITIN-AND  $\pm$ 1000–1400, and SLEUMER 4745–4792).

**COLLECTIONS.** Total collections of the expedition amount to c. 3500 numbers with numerous duplicates; 1st set in *Leyden*, from where the dupl. are distributed, also to *Herb. Edinb.* The bulk of the collection is labelled VAN ROYEN & SLEUMER, *nos* 5625–8259 (continuation of VAN ROYEN's series); in E. New Guinea the *nos* SLEUMER 4125–4190, in the Arfak Mts (W. New Guinea) the *nos* 4191–4490 and SLEUMER & VINK BW *nos* 14001–14359; during the 2nd Arfak trip the *nos* SLEUMER 4491–4507.

**LITERATURE.** (1) *Cf.* Fl. Mal. Bull. no 17, 1962, 887–890; *ibid.* no 18, 1963, p. 988; H. SLEUMER: 'Rhododendron in Neu-Guinea' (Jahrb. Rhodod. Ges. 1963, p. 7–32, 39 photogr. 1 map, incl. itinerary).

(2) H. SLEUMER: 'Rhododendron in Borneo and Thailand' (Jahrb. Rhodod. Ges. Bremen 1965, p. 7–27, 26 photogr.). *Cf.* Fl. Mal. Bull. no 19, 1964, p. 1113–1114.

**BIOGRAPHICAL DATA.** *Blumea* 19, 1971, p. 199–210, portr., bibliogr.

#### Smith, Eryl Glynne

Add: (born at Glyndyl, Bangor, North Wales, G.B.) took a medical degree in London in 1918, and came to Siam (Thailand) as Dr MALCOLM A. SMITH's wife in 1921. Besides collecting in peninsular Siam, she visited Malaya, Hainan (1923), Cambodia (1925), and *Celebes* and *Timor* (1925). Returned to England in 1925, afterwards working on ferns at Kew.

Several plants have been named in her honour.

**COLLECTIONS.** Add: With KERR's private herbarium in *Herb. Brit. Mus.* Total collections >1948 *nos*.

**BIOGRAPHICAL DATA.** *J. Siam Soc. Nat. Hist. Suppl.* 8, 1930, p. 128–129.

#### \*Smith, Gordon

(1941, Aberfeldy, Scotland; x), was educated at

Aberdeen University (B.Sc. Hons 1963, Ph.D. 1968). From 1968 Lecturer, School of Biology, University of Malaya, Kuala Lumpur.

COLLECTING LOCALITIES. 1968. *West Malaysia*, mainly in Selangor, Pahang, and Perak States.—1969. With E. SOEPADMO in *Borneo*.

COLLECTIONS. Nos 150–400 in *Herb. Aberd. Univ.*

**\*Smith, Jeremy Michael Bayliss**

(1945, Stamford, England; x), botanist, educated at Cambridge University, England, 1964–67 (Upper 2nd Hon.), and University of Singapore 1968–69 (Dipl. in Education).

He was a member of the Cambridge Kinabalu Expedition, 1967; other members were J. W. PATTERSON and P. R. WILLIAMS, both reading Zoology in the University of Cambridge.

He chose to make an ecological study of certain high altitude herbs (*in casu* *Ranunculus lowii* and 3 species of *Potentilla*) so as to discover something of the factors controlling their distribution.<sup>1</sup>

He remained in the East, working as a demonstrator in the Dept of Biological Sciences, at the University of Malaya. Now in Canberra, School of Pacific Studies, A.N.U.

COLLECTING LOCALITIES. *Cambridge Kinabalu Expedition, 1967*. Two months in *Sabah* during the summer vacation. Base camp at Park Headquarters Kinabalu. SMITH spent the first three and a half weeks close to the summit, making use of Panar Laban mountain hut (11,000 ft). The three of them made an ascent to Low's Peak (13,455 ft) and subsequently returned to Park H.Q. The second half of the expedition the eastern track to King George's Peak (13,340 ft) was followed, partly different from the one followed by CORNER. Some time was spent at Tuaran before leaving Borneo and paying a visit to *Singapore* and the University of Kuala Lumpur.—1968. Mt Kinabalu, East Summit Party (Apr.),<sup>2</sup> with J. B. LOWRY, A. HINDE, G. JACOBSEN, Dr J. SHERIDAN, and Miss R. BARKER.

COLLECTIONS. ? *Cambridge*, and ? *Herb, Kuala Lumpur*.

LITERATURE. (1) J. M. B. SMITH: 'Herbaceous plant communities in the summit zone of Mount Kinabalu' (*Mal. Nat. J.* 24, 1970, p. 16–29, 2 fig., 2 tab., 1 map, pl. 6–7).

(2) J. M. B. SMITH & J. B. LOWRY: 'Further exploration and observations on Mount Kinabalu East' (*Mal. Nat. J.* 22, 1968, p. 29–40, 3 maps, pl. 5–8).

**Smith, John Swire**

Retired as Director Forest Service, Malaya.

BIOGRAPHICAL DATA. *Mal. For.* 23, 1960, p. 84.

**\*Smith, J. W.**

collected *Vitex siamica* WILL., from G. Baling Kedah, *Malaya* (July 19, 1956).

**Smith, Lindsay Stuart**

(d. Sept. 12, 1970, Mt Barney, W. of Brisbane, Queensland, Australia).

BIOGRAPHICAL DATA. *Courier-Mail*, Brisbane, Monday, Sept. 14, 1970, p. 1; *Fl. Mal. Bull.* no 25, 1971, p. 1878.

**Smythies, Bertram Evelyn**

Add: Served in Brunei up to 1959, and was appointed Conservator of Forests in Sarawak in September 1959; retired in 1964.

He recruited and looked after a team of Iban tree-climbers to whose efforts many valuable tree collections are due. He settled in Spain.

He has a large interest in ornithology and is the author of books<sup>1</sup> and papers on birds.

*Parashorea smythiesii* WYATT-SMITH *ex* ASHTON has been named after him.

COLLECTING LOCALITIES. *NW. Borneo. Prior to March 1957 in Brunei* and in the neighbouring Limbang and Lawas Districts of *Sarawak*.—1957. Temburong Distr. (Mar. 15–Apr. 10, with G. H. S. WOOD and P. S. ASHTON); Bt Sagan (535 m), Limbang Distr. (Apr. 19–20); Andulau F. R., Belait Distr. (23–27 with WOOD and ASHTON); Labi road and Bt Teraja (417 m), Belait Distr. (May 16–23, with ASHTON); Kuala Ingei, Ulu Belait (July 5–12, with ASHTON); Ulu Temburong (Oct. 31–Nov. 8, with ASHTON); Andalau F. R. (Dec. 4–8, 24–27).—1958. Sg. Iran, Ulu Sg. Pelagus, Kapit Distr. (Sept. 14–16); Sg. Medamit, Limbang Distr. (Dec. 9–17).—1959. *N. Borneo*: Mt Kinabalu along normal route from Tenompok to summit (Feb. 25–Mar. 12, nos S 10601–10650 and 10951–10959).—1960. *Sarawak*: Mt Matang (910 m) near Kuching (Mar. 13, Apr. 3, May 29, July 4), G. Gading (884 m) Lundu Distr. (Apr. 12–14); Tiang Bekap on Padawan Rd, Kuching Distr. (June 3–6, with J. A. R. ANDERSON); Sg. Sabal Tapang, Serian-Simanggang Rd (Aug. 4–9, with J. SINCLAIR and J. A. R. ANDERSON); G. Berumpit and G. Kanyai (1554 m) in Pueh Range, Lundu Distr. (Aug. 25–30); Sg. Lajang, Sg. Bena (Ulu Sg. Sut), Kapit Distr. (Oct. 2–7).—1961. Mt Matang and Mt Selang area, near Kuching (Sept. 29 with E. J. H. CORNER, Oct. 24–27); Sg. Sabal Tapang on Serian-Simanggang Rd (Oct. 16–18); G. Pueh F. R. at Sungei Sebat Kechil near Sematan (Nov. 4–10). *N. Borneo*: Mt Kinabalu, Hot Springs area with *Roy. Soc. Expedition* (July 4–24).—1962. With B. L. BURTT and P. J. B. WOODS to Bako National Park (May 17–20), Niah cave (June 3–11), Pelagus Rapids area Kapit Distr. (July 19–24).

COLLECTIONS. Specialising in *Dipterocarpaceae*, *Nepenthaceae*, and *Ericaceae*, and all trees attaining timber size. Brunei, Limbang and Lawas collections in *Herb. Brunei*, dupl. distributed through Kepong. Collections 1957–59 jointly with P. S. ASHTON and distributed under Brunei nos. From Sept. 1959 onwards in *Herb. Sarawak*.

LITERATURE. (1) 'The Birds of Burma' (Edinburgh 1953); 'The Birds of Borneo' (Edinburgh 1960).

**\*Soares, F. A.**

collected 71 specimens of grasses in *Portug. Timor* in 1961; in *Herb. Lisbon*.<sup>1</sup>

LITERATURE. (1) Cf. MARGARIDA DE CASTRO: 'Contribuicao para o conhecimento das Gramineas de Timor' (Garcia de Orta 12, 1964, p. 45–66; see p. 45).

**\*Soegeng Reksodihardjo, Dr W.**

In 1967/68 he taught botany in Honolulu University, Hawaii. Then Assistant Director of the

SEAMES project BIOTROP, the Southeast Asia Centre of Biology; in 1972 he had resigned.

**COLLECTING LOCALITIES.** 1966. With KOSTERMANS (see there) to *New Guinea*.—1967. With NEDI in *Irian*, as a member of the border expedition with Australian New Guinea (see *sub* RIDSDALE).—1970. *E. Kalimantan*. A joint 6-weeks survey to Kutai Nature Reserve (May), sponsored by BIOTROP.

**COLLECTIONS.** Presumably in *Herb. Bog*.

Soejatmi, see SOENARKO.

**\*Soenarko, Miss Soejatmi**

agrostologist at Bogor,<sup>1</sup> about 1972 she received a grant for attaining a Ph.D. at Reading, England. She made field trips in *W. Java* (1970) with KOSTERMANS and J. DRANSFIELD.

**LITERATURE.** (1) Author of: 'Rumpu<sup>2</sup> di Pulau Peutjang (Udjong Kulon)' (*Berita Biol. I*, pt 3, 1971, p. 8–11).

**\*Soepadmo, Engkik**

(1936, Java, Indonesia; x), educated at the Tjiawi Academy of Biology (B.Sc. 1959), and since then Assistant Botanist of the Herbarium Bogoriense. He followed a field training course in Sarawak under Dr ANDERSON.

For some years, till 1966, working under supervision of Prof. E. J. H. CORNER at Cambridge on a revision of the genus *Quercus* for a Ph.D. In 1966–68 he was at Leyden to work on the *Fagaceae*, resulting in a revision for *Flora Malesiana*.

In 1968 appointed Lecturer in tropical plant taxonomy at the University of Malaya, Kuala Lumpur.

He published a monograph of the genus *Neesia*, and is now working on *Ulmaceae*.

**COLLECTING LOCALITIES.** 1958. *Bali* (June 10–July 14);<sup>1</sup> *W. and Centr. Java* (Oct. 29–Nov. 1): Pangandaran, *Nusa Kambangan*, Tjikatok, Pendjalu; *W. Java* (Nov. 8–15); *Peutjang I.*, Udjong Kulon.—1959. *W. Ceram* (June 1–26); *Ambon* (July 5–Oct. 8); *W. Java*: Bogor Bot. Gard.; Tjibodas (Dec. 23).—1960. *Sumatra East Coast*: Pakanbaru, Tenajan R. (Aug. 10–27).—1961. *Sum. E. C.*: Sibolangit (Apr. 11–19); *Centr. Sumatra*: Pakanbaru (Aug.–Sept.); *Singapore I.*: Bt Timah (Nov. 5–6); *Peutjang I.* (Dec. 16–28).—1969. In *Borneo* with G. SMITH.—1970. *Malaya*. G. Tahan expedition (Aug. 26–Sept. 8)<sup>2</sup> from Kuala Tahan; summit Sept. 5.—He will occasionally continue collecting in *Malaya*.

**COLLECTIONS.** *Herb. Bog.*: plants from *Bali* (together with SOEGENG, KUSWATA and KOSTERMANS, nos 1–346), *Java* (with ditto, nos 347–423), *Ceram* and *Ambon* (see KUSWATA), *Java* 1959 (nos 1–11), *Sumatra* (nos 12–252, 254–261), *Singapore* (nos 262–267), *Peutjang I.* 1961 (nos 268–331). *Malayan* plants presumably in *Herb. Univ. Malaya*, Kuala Lumpur.

All dupl. from *Sumatra* 1960 to *Copenhagen* where they forwarded the funds for this trip. One set will go to *Leyden*; also dupl. in *Herb. Edinb.*

**LITERATURE.** (1) Cf. *Penggemar Alam* 40, 1961, p. 25–43.

(2) E. SOEPADMO: 'Plants and Vegetation along the path, from Kuala Tahan to Gunong Tahan' (*Mal. Nat. J.* 24, 1971, p. 118–124, pl. 33a–40b).

**Solander, Daniël Carl**

(rightly: b. 1733). For additional literature on COOK's first Voyage see *sub* BANKS in this Supplement.

**BIOGRAPHICAL DATA.** Add: R. A. RAUSCHENBERG: 'Daniel Carl Solander naturalist on the Endeavour' (*Trans. Amer. Philos. Soc. Philad.* n.s. 58, pt 8, 1968, 66 pp.; cf. also book notice by A. M. LYSAGHT in *J. Soc. Bibliogr. Nat. Hist.* 4, 1970, p. 329–331).



SOEPADMO, 1967

**Sonnerat, Pierre**

**LITERATURE.** (1) Add: Cf. also M. LY-TIOFANE in 'Pierre Poivre et l'expansion française dans l'Indo-Pacifique' (*Bull. École Franç. Extr.-Or.* 53, 1967, p. 473–478).

**Soriana, Joventino D.**

a M.S. Botany graduate, U.P.; Ph.D. in genetics in U.S.A. Connected with the Philippine Dept of Botany, College of Liberal Arts, U.P.

**COLLECTING LOCALITIES.** Add: *Mindoro*: Calapan; *Luzon*: Rizal Prov.

**Sow bin Tandang**

(d. Jan. 25, 1971) was also in Sabah, Sarawak, and Brunei; retired in March 1969 after 42 years service as plant collector at Kepong (*Malaya*).

**BIOGRAPHICAL DATA.** *Mal. Forester* 33, 1970, p. 282.



**Spare, Gordon H.**

COLLECTIONS. Add: Also dupl. in *Herb. Edinb., Malay Peninsula 1938.*

**Sparrman, Andreas (or Anders)**

He returned to the Cape Colony when Cook's 2nd Voyage touched again at Capetown.<sup>4</sup>

LITERATURE. (2) Add: A. SPARRMAN: 'Un compagnon Suédois du Capitaine James Cook. La coquille qui chante' (Oslo 1939; transl. from Resa till Goda Hopps-Udden . . . 1783, 1802).



SOW BIN TANDANG,  
the late chief tree climber at Kepong, 1967.

(4) In Suppl. Cycl. Fl. Mall I, 5, 1958 add: H. ST. JOHN's statement (Natur. Canad. 98, 1971, p. 563) that SPARRMAN was asked to join the expedition at the Cape at the instigation of the FORSTERS seems doubtful with a view to the earlier recommendation by EKEBERG.

**Sporleder, Friedrich Wilhelm**

Add: (1787, Wernigerode, Germany; 1875, *ditto*) studied law, but had a large interest in natural history and geology. He had an extensive correspondence with KUNZE, SPRENGEL, SLECHTEN-DAHL, and others, and owned private collections, including 200 portfolios of dried plants, which were bequeathed to the royal collections at

Wernigerode. The *Java* plants (*cf.* Fl. Mal. I, 1, 1950, and *ibid.* II, 1, 1963, p. 159) were certainly not collected by himself.

BIOGRAPHICAL DATA. Allg. Deutsch. Biogr. 35, 1893, p. 275-277.

**\*Stainton, John David Adam**

(1921, London, England; x) was educated at Winchester College and Christchurch Oxford. Hons degrees in History and Law; barrister-at-Law. Assistant in the organization of the Royal Society North Borneo Expedition 1961. Plants were collected with CHEW and CORNER (see there) in the RSNB series. His real interest is Himalayan, but he collected in the Balkan and Greenland too.

COLLECTIONS. For *Borneo* see under CORNER.

**\*Start, A.**

collected *Mucuna bicipitata* T. & B. from Bukit Anak Takun, Selangor, *Malaya* (Jan. 23, 1972).

**\*Stauffer, Hans Ulrich**

(1929, Aarau, Switzerland; 1965, Aarau, Switzerland), botanist educated at the University of Zürich (Ph.D. 1959); later University Lecturer there.

He visited New Guinea when on his world tour (1963-64) for herbarium and field study of the *Santalaceae*.

COLLECTING LOCALITIES. 1963. *E. New Guinea*: Lae, Bulolo, Kainantu, from Keglsugl to the lakes E of Mt Wilhelm, Port Moresby, Sogeri. He then proceeded to New Caledonia, Fiji, and Hawaii, returning to Switzerland in Aug. 1964.

BIOGRAPHICAL DATA. Fl. Mal. Bull. no 20, 1965, p. 1234-1235; Adansonia 6, 1966, p. 23-24; Mitt. Aargau. Naturf. Ges. 27, 1966, p. 279-286, portr., illustr.; Vierteljahrschr. Naturf. Ges. Zürich 111, 1966, p. 457-458.

**Steenis, C. G. G. J. van**

Add: In 1959 he was awarded a honorary Dr's degree at the Université de Montréal. From 1962-72 Director of the Rijksherbarium, Leyden.

LITERATURE. (40) Add: R. GEESINK: 'Two new species of *Swertia* (Gentianaceae) from N. Sumatra' (Blumea 20, 1972, p. 132).

BIOGRAPHICAL DATA. Blumea 20, 1972, p. 1-6, portr.; *ibid.* p. 7-24, 6 fig.; Trop. Ecol. 13, 1972, p. 1-4, portr.

**Stefels, Casper Jacobus**

Add: Later employed in the Dutch Forestry Service, stationed at Zwolle (O.).

COLLECTING LOCALITIES. 1955. Anggi Lakes add:<sup>1</sup>

LITERATURE. (1) C. J. STEFELS: 'Orientatie-tournee Bosverkenning Ransiki-Anggi-meren' (Manokwari, 1955; typewritten report).

Itinerary with annotations by W. VINK in *Nova Guinea, Bot.* 22, 1965, p. 490-491, fig. 4.

**Steiner (née Lindenberg), Mona Lisa**

Add: made an exploration in Mt Pulog area (Mar. 1961), revisiting it in May of the same year with H. SLEUMER and P. VAN ROYEN (see those).

The family later returned to Europe.

COLLECTIONS. Add: Dupl. *Philippine Is.* (1961) in *Herb. Edinb.*



## \*Steinkraus, W.

COLLECTIONS. *Herb. Edinb.: New Guinea plants* (1965).

## \*Sterly, Joachim

(1926, Bremen, Germany; x) took his Ph.D. at the University of Cologne, Germany (1963), and subsequently got a grant from the 'Deutsche Forschungsgemeinschaft' (1963–66).<sup>1</sup> Founder and chairman of the 'Arbeitsgemeinschaft Ethnomedizin' (1970), and Editor of the periodical 'Ethnomedizin' from 1971 onwards. From 1970–73 he was once more awarded a grant and made a study of ethnobotany, medicinal plants and medicinal sociology in the New Guinean highlands.<sup>2</sup> End 1973 appointed lecturer of ethnology and theoretical anthropology at the University of Cologne.

ITINERARY. 1971. *Territory of Papua and New Guinea* (June 1–Dec. 30): Port Moresby, Lae, Madang, Rabaul (*New Britain*), Goroka, Mt Hagen, and Kundiawa. Collecting was done in Chimbu Valley, Chimbu Distr., Central Highland, viz: in Lower Chimbu, territory of the Kamanuku tribe (environs of Kundiawa and Porol Range), and in Upper Chimbu, territory of the Kuglkane tribe (environs of Womatne south of Gembogi).

COLLECTIONS. About 300 useful plants of the Kamanuku and Kuglkane, *Herb. Hamb.*

LITERATURE. (1) His bibliographical study resulting in 'Heilpflanzen der Einwohner Melanesiens' (Hamburg 1970).

(2) J. STERLY: 'Krankheiten und Krankenbehandlung bei den Chimbu im Zentralen Hochland von Neu-Guinea' (Buske Verlag Hamburg 1973).

## \*Stern, William Louis

(1926, Paterson, N.J., U.S.A.; x), botanist, educated at Rutgers University (1950, B.S.), Univ. of Illinois (M.S. 1951), Ph.D. 1954. Instructor, then Assistant Professor Yale School of Forestry, 1953–60, Curator Div. Plant Anatomy Smithsonian Institution 1960–64.

Acting Chairman of the Smithsonian Institution, Washington, D.C., Botany Department, onwards of 1964.

F.A.O. Forestry Officer and Wood Technologist at FPRI College, Laguna, Luzon, 1963–64.<sup>1</sup>

COLLECTING LOCALITIES. *Philippines*. 1963. *Luzon*: Laguna and Batangas Provinces. *Mindanao*: Prov. of Agusan, Tungao, drainage of Agusan R., 26 km S of Butuan, concession of Nasipit Lumber Co., Inc. (Sept. 28–Oct. 1). *Luzon*: Prov. of Quezon, Maliliit na Bato, drainage of Dakil R., 17 km E of Pangil (Alt. 1400 ft), concession of Intern. Hardwood and Veneer Co. (Oct. 24); Mountain Prov. (Nov. 25–26, coll. by and with BENIGNO A. LOMIBAO).—1964. *Luzon*: Mountain Prov., Subprov. of Bontoc, at Bauko, forests on slopes of Mt Data between 7000 and 8000 ft alt. (Feb. 10–13, with JUSTO P. ROJO).

COLLECTIONS. Probably in Washington and in the Philippines.

LITERATURE. (1) W. L. STERN & I. T. ZAMUCO: 'Identity of 'Tiaong' (Dipt.)' (*Brittonia* 17, 1965, p. 35–46, 5 fig., 1 tab.).

BIOGRAPHICAL DATA. Who's who in America vol. 34, 1966/67.

## Steup, Ferdinand Karel Marie

(d. 1971, Périgord, France).

## \*Stevens, Peter F.

from Edinburgh, went to the Botany Division, Lae, May 1970. In 1971 he collected with M. J. E. COODE.<sup>2</sup> Leader of an expedition to Mt Suckling (*Papua*) in mid-1972 (see also J. F. VELDkamp and R. PULLEN).

Joint author on a list of plants of Mt Wilhelm.<sup>1</sup> Probably he collected in the series of the institute; *Herb. Lae etc.*

LITERATURE. (1) R. J. JOHNS & P. F. STEVENS: 'Mount Wilhelm Flora. A Check List of the Species' (*Bot. Bull. no 6 Div. Bot. Lae*, 1971, 60 + 4 pp., 7 fig., 1 map).

(2) Authors of: 'Notes on the Flora of Two Papuan Mountains' (*Pap. New Guin. Sc. Soc. Proc.* 1971, 23, 1972, p. 18–25).

## Stok, Johan Ewald van der

(d. 1958, Naarden, N.H., Netherlands).

## Stokey, Alma Gracey

(d. 1968).

BIOGRAPHICAL DATA. *Amer. Fern J.* 58, 1968, p. 145–154, 1 photogr.).

## Stomps, Theodoor Jan

(d. 1973, Amsterdam, Netherlands).

BIOGRAPHICAL DATA. *Vakbl. Biol.* 53, 1973, p. 223–224, portr.

## \*Stone, Benjamin Clemens

(1933, Shanghai, China; x) was educated in California (B.A. Pomona College, Claremont, 1954), and did one year of graduate work at Washington University under R. E. WOODSON and others; Ph.D. in 1961 at Hawaii University. From 1961–65 in the Department of Biology, College of Guam, finally as Professor. In 1965 moved to the University of Malaya, Kuala Lumpur as Lecturer in Botany and Curator of the University Herbarium. Founder of the journal 'Micronesia'.

Author of numerous papers on *Pandanaceae* and other subjects.

*Heliconia stonei* LANE is or will be named after him.

COLLECTING LOCALITIES. 1957. *New Britain*: Rabaul and vicinity (Dec.).—1958. *New Ireland*: Kavieng and vicinity (Jan.).—*Malaya* (from Apr. 1965–67): Selangor, Perak, Pahang, *Penang* (Feb. 1966), Johore, *Singapore* (Apr.), Fraser's Hill (Apr.–May), *Penang* (May), Ipoh, *Langkawi Is.* (May 1967).—In *Borneo*: Sabah (Mar. 1967), Sarawak (Apr.).—1971. *E. New Guinea*: Mt Wilhelm (Apr.).

COLLECTIONS. Up to June 1967, 7131 nos; 1–725 from the U.S.A. and Switzerland in San Diego Nat. Hist. Mus.; nos 726–2588, 2642–5512 mostly from the Pacific region, of which 726–3774 in *Herb. Bish. Mus.*, 3775–5512 in *Coll. Guam Herb.*, with dupl. at *Leyden, U.S., Bish. Mus.* and a few elsewhere. The nos 5513 onwards from *Malesia* will be distributed to *Leyden, Sing., Bish. Mus., Kew, etc.* A few holotypes will be deposited at the *Univ. of Malaya Herb.* In *New Guinea* LAE 53091–53254 from Mt Wilhelm; *Herb. Lae*.

## \*Stone, Oct. C.

A naturalist who, about 1875<sup>1</sup> and possibly also later,<sup>2</sup> visited the area near Port Moresby in *E. New Guinea* (Papua). He made zoological collections near Baxter and Laloki Rivers *etc.*, and shipped or carried 8 varieties of sugar-canes to Brisbane.<sup>3</sup>



B. C. STONE and son

LITERATURE. (1) O. C. STONE: 'Letter from Papua' (The Queenslander, Brisb. Feb. 12, 1876).

(2) O. C. STONE: 'A few months in New Guinea' (London 1880; review in Ind. Gids 2<sup>o</sup>, 1880, p. 145).

(3) Cf. J. H. WARNER & CARL O. GRASSL in Hawaiian Plant. Rec. 55, 1958, p. 211, 213.

## Stonor, C. R.

Add: In 1949 he again collected on Mt Wilhelm (Bismarck Mts).

## Straelen, Victor Emile van

(d. 1964).

LITERATURE. (1) Add: See some annotations on the Arfak area route by W. VINK in Nova Guinea, Bot. 22, 1965, p. 486.

BIOGRAPHICAL DATA. Add: LE FLAMBEAU: 'Hommage à V.-E. van Straelen, 1889-1964' (162 pp., 2 pl., portr.); Bull. Soc. Linn. Norm. X, 5, 1964, p. 12-19; Natur u. Mus. 94, 1964, p. 217.

## \*Street, John Malcolm

(1924, McIntosh, South Dakota, U.S.A.; x), B.A. of the University of California, Berkeley, in

1948; Ph.D. at the same institution in 1960. Since 1960 a member of the geography faculty at the University of Hawaii, Honolulu. He made expeditions to Haiti (1952 and 1953), and to New Guinea (see below).<sup>1</sup>

ITINERARY. *Terr. of New Guinea*. 1964. Bismarck Mountains via Simbai Patrol Post (July), collecting at the villages of Tsembaga, Gunts, Kwima, and KOMPIAI until Jan. 1965.—In 1967 Bismarck Mts with his assistant H. MANNER (see there) via the Koinambe Anglican Mission in April, collecting in the vicinities of Koinambe, KOMPIAI, Kupeng, and Tsuwenkai until Sept. Later collecting was done by MANNER.

COLLECTIONS. *Herb. Lae*: 194 specimens *New Guinea* 1964 for identification and storage; 599 specimens coll. STREET & MANNER *New Guinea* 1967-68. Dupl. sets 1967-68 in *Leyden*, and in *Geogr. Dept Univ. Hawaii*.

LITERATURE. (1) Author of 'Grasslands on the Highland Fringe in New Guinea' (J. Queensl. Geogr. Soc. 3, 1966, p. 9-12); (with W. CLARKE): 'Soil Fertility and Cultivation Practices in New Guinea' (J. Trop. Geogr. 24, 1967, p. 7-11).

BIOGRAPHICAL DATA. American Men of Science; Who's who in Amer. Education.

## \*Streimann, Heinar

(1938, Tartu, Estonia; x), from 1959-61 at the Bureau of Meteorology, Melbourne, assisting in research; 1961-63 Dept of Forests, Bulolo, New Guinea—road locations, land surveys and mapping; 1964-71 lecturing in botany and timber identification at the Bulolo Forestry College, establishing and maintaining a teaching and reference herbarium at the College; 1971-72 Senior Technical Officer at the Division of Botany, Lae, in charge of botanical collections;<sup>1</sup> Nov. 1972— in charge of the Herbarium at the Canberra Botanic Gardens.

COLLECTING LOCALITIES. 1964-72. *Papua & Austr. New Guinea*, except for the following districts: Southern Highlands, Madang, New Ireland and Bougainville. Much collecting in the Morobe District.

COLLECTIONS. In NGF series, often with A. KAIRO, between 8500-9000 numbers, sets in *Bulolo, Lae*. Dupl. distributed by Lae.

LITERATURE. (1) Author of 'A new Balanophoraceae, subfamily Langsdorfiaceae, from New Guinea' (co-author J. S. WOMERSLEY, in *Papua & New Guinea Scient. Soc.* 1971). Timber Species Leaflets 1-10 published, 225 to be published.

## Stresemann, Erwin

BIOGRAPHICAL DATA. Portr. in Ornith. biol. Wissensch. Heidelberg 1949; list of ornithological publications in H. M. WHITTILL, 'The Literature of Austral. Birds' 1954, pt 2, p. 690-692.

## \*Sudjana Kasan

Curator of the Bogor Botanic Gardens, collected a new *Begonia* near Padang, *Sumatra West Coast*.<sup>1</sup>

LITERATURE. (1) C. A. JANSSON: 'Ein neue *Begonia* aus Indonesien' (Act. Hort. Gotob. 26, 1963, p. 1-4, 2 fig.).

\***Sumague, P. P.**, see Philippine National Herbarium.

**Sun Hong Fan**

COLLECTING LOCALITIES. Add: 1963. *S. Sumatra* (June–July): Baturadja, Palembang, Telok Betong.—1964. *Lesser Sunda Is: Lombok* (Apr.–May).

COLLECTIONS. Add: 550 nos from *Lombok* (1964) in *Herb. Bog.*; dupl. *Herb. Leyden*.

His total collections number to about 10,000 (Flora of the Southsea Islands).

\***Suppiah, T.**

Assistant of the Forest Research Institute, Kepong, *Malaya*.

COLLECTING LOCALITIES. *Malaya*. 1966–67. *Johore*.—1968. *Kelantan Ulu Sat F. R.* (June 6–20); *Selangor, Ulu Langat* (May 2–7); *Negri Sembilan, Jelebu* (July 1–10).

COLLECTIONS. In *Herb. F.R.I. Kepong*.

**Surbeck, Heinrich**

COLLECTING LOCALITIES. Add: 1941. *N. Sumatra* (Sept.).

COLLECTIONS. Add: 1941 collection also in E.T.H. (Techn. Coll.) *Zürich*.

\***Susard, J. B.**, see Philippine National Herbarium.

\***Sutrisno**

collected >94 nos at Tjibodas (Oct. 12, 1957), *W. Java*; in *Herb. Bog.*; partly in *Herb. Leyden*.

\***Suwanda Amongprawira**

of the Forest Research Institute at Bogor, accompanied the Tjendrawasih Expedition to the Central Highlands of New Guinea (*Irian*) from Inarutali to Byoga (Dec. 1963–Jan. 1964), collecting c. 100 nos.

**Sijde, Hendrik Adolf van der**

Add: Later he went to S. Africa.

**Symington, Colin Fraser**

BIOGRAPHICAL DATA. Add: *Cf. Mal. For.* 26, 1962, p. 107–108 (on the fate of his book on *Dipterocarps*).

**Sijpkens, J. P.**

COLLECTIONS. Add: *Herb. Wageningen*: a dozen plants from Tjikopo Zuid (*W. Java*).

\***Szent-Ivany, J. J. H.**

collected a few plants on Mt Strong (*Papua*) at the end of August 1963; in *Herb. Lae*.

\***Tarnavaschi, Dr**

from Rumania, accompanied A. DILMY (see there) on a tour to *Bali* to study pioneer plants on Mt Agung in 1963.

\***Taylor, Edward**

collected a plant with D. H. NICOLSON (see there) in *Sarawak*, Aug. 1960.

TCW nos, see T. C. WHITMORE.

\***Telussa, A. W.**

see Boswezen Nieuw Guinea.

\***Teo Leong Eng**

(1938, Malacca, Malaysia; x) B.Sc. in Botany from Taiwan (1963); Research Assistant in Seed Technology at Chemara Research Station (Oil Palm Branch) from 1963–65; at the Faculty of Agriculture, University of Malaya from 1965–66; since 1967 Technical Assistant (Botanist) in the Department of Chemistry. He will continue



STREIMANN

collecting for the Phytochemical Survey of Malaya after the departure of J. CARRICK (end 1967). He has a large interest in taxonomic work.

COLLECTING LOCALITIES. Mostly in *Selangor, Perak, Pahang, Trengganu, and Johore* of the states of *Malaya*.

COLLECTIONS. From 1968 he will make field collections with G. PACHIAPPAN (see there); they will begin their numbers as T. & P. 1 (PCSM no 2601). *Herb. Kuala Lump.*; dupl. at *Leyden, Kew, Singapore*.

**Teruya, Z.**

COLLECTIONS. Add: Also specimens in *Kyoto Herb. Fac. Science*.

**Textor, Carl Julius**

Add: He arrived in Java on June 25, 1842. He did not succeed to secure accommodation on one of the ships bound for Japan, before June 1843. In the meantime he was given a job on a plantation by the D.E.I. government (*cf. Jaarb. Kon. Mij. Aanm. Tuinb.* 1, 1844, p. 15–16).

T.G.H., see T. G. HARTLEY

**\*Thomson, T.**

COLLECTIONS. *Java* plants in *Herb. Oxford* (cf. Account by H. NEWMAN CLOKIE, Oxford 1964, p. 117).

**\*Thorne, Robert F.**

(1920, Spring Lake, N.J., U.S.A.; x) botanist, graduated with A.B. from Dartmouth College in New Hampshire (1941), awarded the M.S. (1942), and the Ph.D. on the flora of SW. Georgia (1949) at Cornell University. Subsequently to the State University of Iowa, later (1960) Associate Professor of Botany; at present Curator of the Herb. of Rancho Santa Ana Botanic Garden (Cal.) and Honor. Professor in the Claremont Graduate School. Though most of this earlier research has been in floristics, in recent years he took up the study of angiosperm phylogeny and geography. As a Fulbright Scholar he worked with Prof. HERBERT at Brisbane, Queensland, and travelled widely in Australasia in 1959–60. After his return to the States he paid visits to Bogor, Singapore, etc., when en route by plane to England, where he would stay 5 months, working at Kew and the British Museum.

COLLECTING LOCALITIES. 1960. *NE. New Guinea*: with E. E. HENTY near Lae, along Busu River (May 23), Markham Point and ridge above (24), Lae Bot. Garden (25), Oomsis Logging Area and Markham River (26); jointly with J. S. WOMERSLEY (May 31–June 5) in the vicinity of Kikiepa, Wantoat Patrol Post Area, Lae Sub-distr., and Morobe Distr. (Finisterres); with WOMERSLEY (June 9–11) to Bulolo, Wau, and Edie Creek areas, up to c. 7000 ft; with WOMERSLEY to *SE. New Guinea* (13–18): Port Moresby, Brown River, Sogeri Plateau areas, Rouna Falls. *W. Java*: Tjibodas Mountain Gardens (July 23, with A. DILMY). *Singapore*: Bt Timah (July 27, with Prof. GILLILAND).

COLLECTIONS. In Australian *New Guinea* about 525 *nos*, viz 27437–27541 in his own series (coll. May 23–26), and the others numbered in the NGF series with J. S. WOMERSLEY. In *Java* and *Singapore* his own numbers 27814–27824, and 27825–27835 respectively. The NGF numbers are placed at *Lae* etc. (see *sub New Guinea Forests*); collections under his own numbers (mostly 5 sheets apiece) at *Lae*, *Brisbane*, the 1st set probably going to *State Univ. of Iowa* and the others to the *U.S. Nat. Herb.* and *Leyden*.

The 1st set of the Australian collection (appr. 8000 *nos*) will be deposited at *Iowa* or *U.S. Nat. Herb.*, the 2nd at *Brisbane*. The 1st set of the *New Caledonia* collections (>700 *nos*) is planned to go to *Paris*, the 2nd to *Iowa* or *U.S. Nat. Herb.*, and the 3rd to *Brisbane*.

**Thunberg, Carolus Petrus**

BIOGRAPHICAL DATA. Add: Act. Phytotax. Geobot. 2, 1933, portr. facing p. 226.

**Thung, Tjeng Hiang**

(d. 1960, Wageningen, Gld., Netherlands).

BIOGRAPHICAL DATA. Vakbl. Biol. 41, 1961, p. 1–3.

\*Tikau, Putan, see Forest Dept North Borneo.

\*Tingguan, Suah, see Forest Dept North Borneo.

**Tirto Atmodjo, R.**

(d. end Dec. 1903).

BIOGRAPHICAL DATA. Versl. 's-Lands Plantentuin for 1903, p. 20.

**\*Tissing, M. O.**

naval surgeon who accompanied the Star Mountains Expeditions in *Central New Guinea* in 1959 (see under C. KALKMAN). He took part in the ascent of Mt Juliana (Sept. 9, 4640 m). He collected some plants in collaboration with KALKMAN, numbered in the latter's series.

**\*Togashi, Makoto**

Japanese professional plant collector. He collected for the 'Medical Company Herbarium Laboratory Takeda'.

COLLECTING LOCALITIES. 1961–62. *Malay Peninsula*, a.o. in *Johore* and *Singapore*.—1966. *Borneo*.

COLLECTIONS.<sup>1</sup> In *Kyoto Herb.*, Fac. Science. He has an intricate way of numbering, e.g. 6222413 means 1962, 2nd month, 24th day, no 13.

LITERATURE. (1) J. OHWI: 'Grasses of the Malay Peninsula and Singapore collected by Mr. M. Togasi' (Bull. Nat. Sc. Mus. 6, 1962, p. 119–123).

\*Tolentino, M., see Philippine National Herbarium.

**\*Tomlinson, Phillip Barry**

B.Sc., Ph.D., Fairchild Tropical Garden, Florida, U.S.A. He made a trip to *Papua* on his way to Auckland. Possibly he collected plants. In Sept. 1955 he collected at Ipoh, Perak, *Malaya*.

**\*Toreu, B. N.**

collected with D. G. FRODIN (see there) in 1973.

**\*Toyoshima, Masami**

of the Insectivorous Plants Society, Dept of Biology, Nippon Dental College, Fujimi, Tokyo, Japan, joined an expedition to the Philippines in search for *Nepenthes*.

COLLECTING LOCALITIES. *Philippines*. 1965. *Mindanao* & *Luzon* (3 weeks in Aug., see S. KURATA, also for Literature).

**Treub, Melchior**

BIOGRAPHICAL DATA. Add: G. H. ZEIJLSTRA: 'Melchior Treub. Pioneer of a New Era in the History of the Malay Archipelago' (Amsterdam 1959); in Dictionary of Scientific Biography, New York (ined.).

**Trono Jr, Gavino**

Add: Botanist, algologist in the University of Hawaii. Married to Miss L. BASKINAS (see there).

**Tryon, Henry**

Add: COLLECTING LOCALITIES.<sup>1</sup> In 1895–96 in *Papua*: sailing from *Brisbane* (Aug. 26, 1895) for *Thursday I.*; from there (Sept. 14) to Port Moresby, coast E of it, Kemp Welch R. (collection lost), Caution Bay, Port Moresby, several weeks in Milne Bay and Samarai, Mullen's Harbour area, and return to Cooktown (early Jan. 1896).

LITERATURE. (1) Cf. Hawaiian Plant. Rec. 55, 1958, p. 213.

## \*Tuckwell, E.

collected unnumbered plants on Mt Wilhelm, *E. New Guinea* (Nov. 1960).

## \*Turnau, E. A.

collected some plants from *Langkawi*, Kedah (Aug. 5, 1962).

## \*Turnbull, John Wright

(1940, England; x) took his B.Sc. (Hons) in Forestry (Bangor, Wales) 1962; Forestry Officer, South Australia Woods and Forests Department (1962–65); since 1965 Genetics Section, Forest Research Institute, Canberra, Australia.

He made seed collections in western U.S.A. (1968) and in the Philippines (1969).

**COLLECTING LOCALITIES.** 1969. *Philippines*. *Luzon* (Mar.–Apr.): provinces Ilocos Norte, Abra, Bontoc, Benguet, Pangasinan, Nueva Vizcaya and Zambales; *W. Mindoro* (Apr.).

The entire natural distributions of *Pinus insularis* and *P. merkusii*.

**COLLECTIONS.** Botanical samples and seed of above-mentioned *Pinus* species; in *FRI Herb. Canberra*.

## Ultée, Arnoldus Johannes

(d. 1963/64).

**BIOGRAPHICAL DATA.** Versl. Treub Mij. Mei 1963–Mei 1964 (no particulars).

## \*Umba, T.

collected some 10 plants on Mt Wilhelm, *E. New Guinea* (Feb. 1970); in NGF series, *Herb. Lae*.

## UPNG nos

series of the University at Port Moresby, New Guinea.

## Usteri, Alfred

**COLLECTIONS.** Add: Also dupl. in *Herb. Bot. Gard. Zürich*.

## \*Valdez, C., see Philippine National Herbarium.

## Valeton Jr, Théodore

(d. early 1962 or late 1961, Netherlands).

## \*Vandenberg, Miss J.

botanist, Div. of Botany, Lae; she collected on Mt Wilhelm (June 1968).

**COLLECTIONS.** In *Herb. Lae*; dupl. distributed, a.o. to *Herb. Edinb.* (*New Guinea*, 1968– ); >250 nos from Mt Wilhelm, in the NGF series.

**BIOGRAPHICAL DATA.** Portr. in *Fl. Mal.* I, 7, 1972, p. 285, fig. 4.

## Vanoverbergh, Maurice

**COLLECTIONS.** Add: List of new species and genera discovered, and those not earlier reported, in a paper by E. QUISUMBING (see below).

**BIOGRAPHICAL DATA.** Add: Act. Manila 4, 1970, p. 25–51.

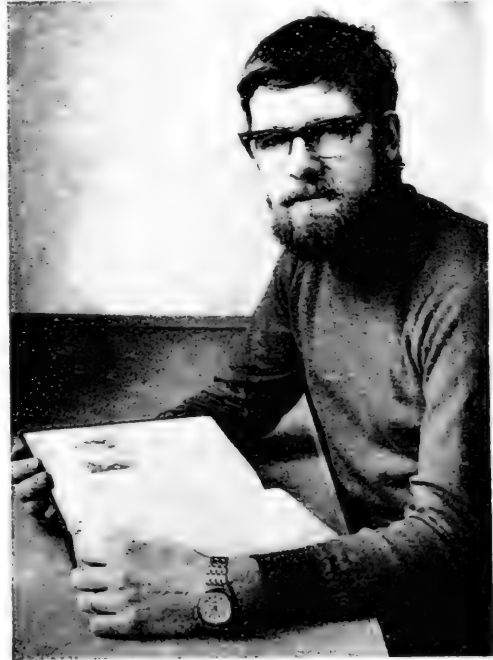
## \*Vayda, Dr Andrew P.

Assistant Professor of Anthropology, Columbia University, made a plant collection with his wife at Simbai, Madang District, *Terr. of New Guinea*,

in 1963. In *Herb. Lae*: c. 80 nos; *Pandanus* dupl. to Dr STONE, bamboos and ferns to Dr HOLTUM.

## Vecht, Jacobus van der

Add: From 1952–55 professor of phytopathology (zoological part) at the Agricultural College at Bogor. From 1955 onwards employed in the Zoological Museum at Leyden; in 1962 appointed Extraordinary Professor of Zoological Taxonomy



VELDKAMP

at Groningen University and from 1964–68 Ordinary Professor in the same discipline at Leyden University. At present living at Putten, Gld., Netherlands.

## \*Velasquez, Dr Gregorio T.

(1901, Calumpit, Bulacan, Philippines; x), phycologist, B.S. (1925) and M.S. (1931) of the University of the Philippines; M.A. (1937) and Ph.D. (1939) of the University of Michigan, U.S.A. Emeritus Professor of Botany, University of the Philippines.

Author of numerous publications on *Algae*.

**COLLECTIONS.** He collected *Algae* from numerous localities in the *Philippines*; in *Herb. Manila*, and distributed to *Leyden*, *Crypt. Herb. of Hokkaido* and *Kagoshima Universities*, *Sing.*, *Adelaide*, *Hawaii*, *Berkeley*, *Cambridge* (Harvard), *Michigan*.

**BIOGRAPHICAL DATA.** Amer. Men of Science 1949; *ibid.* II. Biol. Sc. 9th ed. 1955; *ibid.* Physic. & Biol. Sc. 11th ed. 1967; Philip. Men of Science 1964.

## \*Veldkamp, Jan Frederik

(1941, Amsterdam, Netherlands; x), botanist,

educated at Leyden University, where he took his Ph.D. degree in 1973. Since 1967 a staff member of the Rijksherbarium, Leyden, in charge of the Malesian *Gramineae*. He made an expedition to New Guinea, after which he stayed in Indonesia (mainly Bogor) till Sept. 1972.

COLLECTING LOCALITIES. 1972. *Papua & New Guinea*: with P. F. STEVENS (see also CRUTT-  
WELL and PULLEN): Tumba (May 25–29), Goroka



VERHEIJEN

(31), Goropu-complex or Mt Suckling (June 7–July 25),<sup>1</sup> collecting around the base camp Mayu II (1750 m), at a grass plain (Pumpunipon, 2000 m) where  $-8^{\circ}\text{C}$  was measured, ascending to Goë Dendeniwa (3625 m), back to base and ascending Manurep or Mt Suckling (3676 m) via Goë (3580 m).—*Centr. Java*: Dieng plateau (Aug. 14).—*Bali*: Batur (Aug. 21).—*W. Java*: Bogor (Sept. 15).

COLLECTIONS. The New Guinea specimens will be deposited in *Herb. Leyden, Lae, B.P. Bish. Mus., Canberra, Bog.*, the Java specimens in *Herb. Leyden and Bog.* The Malesian collections are numbered 5442–6040 and in the NGF and LAE series (with P. F. STEVENS).

LITERATURE. (1) J. F. VELDKAMP: 'A botanical Expedition to Mt Suckling (Goropu Mountains), Papua—New Guinea, 1972' (stencilled report, Leyden 1973, 11 pp., map).

**Veloira, Miss Nieya**

Add: Finished her M.D. in Botany in Tennessee University; bryologist in the Botany Dept U.P.

**Verdoorn, Frans**

BIOGRAPHICAL DATA. Add: Regn. Veget. 71, 1970, xv–xxii + 4 pp. suppl., portr.

**Vergara, Benito S.**

Add: plant physiologist, Ph.D. Chicago; on the staff of the I.R.I. (International Rice Institute), Los Baños.

**\*Verheijen, Father Jilis Antonius Josephus**

(1908, Zevenaar, Gld., Netherlands; x), a Roman Catholic missionary who after his clerical education was stationed in Flores (1935–), interrupted by one and a half year of study in Cultural Anthropology and Linguistics at Utrecht University (1949–50).<sup>1</sup>

COLLECTING LOCALITIES. *Indonesia. W. Flores*: on the south coast in the vicinity of (M)-borong (0–200 m alt.), and the vicinity of Sita (400–600 m); in the rain-forests on the north slope and on the summit of the mountain range in Central Manggarai above kp. Mano, Robo, and Ruteng (1200–1950 m); in south Tjibal (N of the range) between 500 and 900 m, and at some other odd localities. Also on *P. Roti* (1969).

COLLECTIONS. *Herb. Leyden*: > 2908 nos in a poor state (nos 2379–2460 from *Roti*).

The collection was made in connection with the preparation of a dictionary of languages and contains some remarkable species.

LITERATURE. (1) Author of papers on anthropology and linguistics of the people of Flores, a dictionary of Manggarai language, and of some ornithological papers in *Ardea* (1961, 1964).

**Ver Huell, Quirijn Maurits Rudolf**

BIOGRAPHICAL DATA. Add: *Bijdr. Taal-, Land-, en Volkenk.* 113, 1957, p. 261–273, portr.

**Vermeulen, Pieter**

LITERATURE. (1) Add: 'Een botanische reis naar het Verre Oosten' (*Vakbl. Biol.* 38, 1958, p. 133–144).

**Verschueren, Johannis Cornelis**

Add: BIOGRAPHICAL DATA. In *STREIT & DINDINGER, Bibl. Missionum* 21, 1955, p. 580, bibliogr.

**Versteegh, Christiaan**

Add: He left New Guinea in Dec. 1962. Since Oct. 1963 attached to the Plant-anatomical Institute of the Agricultural College at Wageningen.

COLLECTING LOCALITIES. Add: 1954. Anggi Lakes with J. F. U. ZIECK a.o. (Feb.).<sup>1</sup>—1956. Forest area near Sausapor, NW. coast Vogelkop Peninsula (2nd half Oct.).—1957. Oransbari; *S. New Guinea*: Digoel R. (Koeweh, Wage, Nanggöe, Getenteri, Omba, Sabekahang, Waghahang, Tanah Merah) (Nov. 12–22).—1958. *W. New Guinea*: Beriat and Wersar, near Teminaboean (Apr. 18–May 5); with F. A. W. SCHRAM in Ajamaroe area (Ajamaroe, Semoe, Jokwer, Kamböeaja, Djitmao, Fan, Tehahg, Aitinjo, Erokwero, Jokoro, Awit, Ewai, Mos, Kami, Itaro, Koa, Teminaboean, Skendi (May)); Oransbari (Sept. 18); *Biak I.*—1959. *Biak I.* with W. VINK (Kg. Landbouw, Son, Bosnik, Parjerie, Siapis = Siabes) (Feb. 18–25).—1960. Sekoli Plain, S of Lake Sentani (Feb.–Mar.); *P. Adi* (Aug. 12–20); Mt Genofa near Kaimana (Aug. 23–30); Kebar Valley (Andjai, Mt



Watjetoni, Mt Nettoti) (Nov. 20–Dec. 2).—1961. E part of Arfak Plain (Masni) (Feb. 24–29); Baliem Valley (Wiligimaan) (June).—1962. With CH. KOSTER to central part Arfak Mts (Minjambau, Mt Antop, Mt Nerimbau, Mt Lensemoi) (May 16–28).<sup>2</sup>—From 1957–62: surroundings of Hollandia in *N. New Guinea* (Noordwijk, Kloofkamp, Hamadi, Berg en Dal, Renauwen, Dojo, Dozai); surroundings of Manokwari in *W. New Guinea* (Maripi, Maroeni, Andai, Arfai, Saowi, Wosi, Fanindi, Manggoapi, Amban, Tafelberg, Borasi, Pasir Poetih).

LITERATURE. (1) J. F. U. ZIECK: 'B.W. orientatietournee Ransiki-Anggi-meren' (Manokwari 1954, typewritten); 'De Anggimeren' (Ned. Nieuw Guinea 3, no 7, 1955, p. 7–10). And cf. W. VINK in *Nova Guinea*, Bot. 22, 1965, p. 490, fig. 3.

(2) Cf. W. VINK in *Nova Guinea*, Bot. 22, 1965, p. 493–494, fig. 6.

\*Versteegh, R., see Boswezen Nieuw Guinea.

Vertenten, Petrus

Add: (d. 1946, Wibriik, Belgium).

BIOGRAPHICAL DATA. In *STREIT & DINDINGER*, Bibl. Missionum 21, 1955, p. 580–581.

\*Vervoort, Willem

(1917, Schiedam, Netherlands; x), zoologist, educated at Leyden University (M.Sc. 1941, Ph.D. 1946); from 1940–46, 1948–50, and since 1959 on the staff of the Rijksmuseum van Natuurlijke Historie at Leyden; from 1946–48 biologist in the employ of the Dutch Society for Whale-fishery, and from 1950 Teacher in Descriptive Zoology, Zoological Laboratory, University Leyden. In 1972 appointed Director of the Natural History Museum at Leyden. In October 1973 Extra-Ordinary Professor.

He accompanied the Dutch New Guinea Expedition to the Sterrengebergte in 1959. Some scientific papers on the zoological results of the expedition will be published in due time.

COLLECTING LOCALITIES. 1959. *Biak* (Schouten I.); *N. Dutch New Guinea*: Hollandia; *Centr. Dutch New Guinea*: Ok Sibil and other localities in the Sterrengebergte, e.g. Tenmasigin (c. 1800 m).

COLLECTIONS. Plants collected with dr A. G. DE WILDE were added to the collections of C. KALKMAN, and Dr B. O. VAN ZANTEN (see those); in *Herb. Leyden*, and *Groningen*.

Vidal y Soler, Sebastian

COLLECTIONS. Add: *Herb. Arn. Arbor.*: 2528 dupl. (pres. 1958–59).

BIOGRAPHICAL DATA. Add: *Fl. Mal. Bull.* no 17, 1962, p. 898–899 (statue).

\*Vink, Willem

(1931, Schiedam, Netherlands; x), botanist, educated at Leyden University (Ph.D. 1970); after military service Forest Botanist at Manokwari, West New Guinea, 1959–62; mid-1962 appointed on the staff of the Rijksherbarium, Leyden.

*Zanthoxylum vinkii* HARTL. and *Rhododendron vinkii* SLEUM. have been named after him.

COLLECTING LOCALITIES. 1959. *Biak I.* with CHR. VERSTEEGH (Feb. 18–25); *W. New Guinea*: Sarmi hinterland (Kwansem, Bodem, Sidoeari Mts, Oereb R., Bier R., Kondirdjan, mouth Tor R.) (May 12–June 14).—1960. With F. A. W. SCHRAM (see there) to the Wissel Lakes (Enarotali, Komopa, Borobaida, Motito, Moenajepa, Mt Monoglito, Doglia, Kebo, Mt Pekeglbaro, Kebo, Enarotali) (May 11–30). *Terr. of Papua & New Guinea*: some collections with J. S. WOMERSLEY



VINK

and Mrs A. N. MILLAR in NGF series (June 16–July 15), from Lae, Bulolo, Wau, Edie Creek, Bulolo, Pt Moresby, Rouna Falls, Idless Bay, Brown R., via Popondetta and Embè near Lae, Rabaul, Keravat, Rabaul, via Kavieng and Wewak to Madang (Gogol Valley, Mt Hagen, Wabag, Kempiam, Chimbu, Goroka, Lae. *Japen I.* (Seroei, Randawaja, Soemberbaba, Aisao, Soemberbaba, Seroei (Sept. 20–Oct. 10)).—1961. *W. New Guinea*: Kebar Valley (Andjai, Asiti, Abi R., Apriri R.) (Feb. 12–24); Sidei (June 5–10); *Arfak Mts*, Mt Beribai<sup>2</sup> (Maroeni bivouac, Lake Njaboeti, bivouac 1075 m, crest Mt Beribai (up to 2100 m) (June 19–24); *Biak I.* (Mokmer, Oregon trail, Parjeri, Saribi, Mokmer, Korim-road, Sjibes) (June 28–July 6); *Mapia Is* (Pegun, Bras) (July 7–8).—1962. *W. New Guinea*: *Arfak Mts.*<sup>2</sup> Anggi Lakes, together with H. O. SLEUMER (Jan. 8–29); Fakfak area (*P. Pandjang*, Fakfak R., Kowap, Hambar) (Feb. 21–27); Lake Ajamaroe (Ajamaroe, Tanah Merah, Segior, Seta, Tubun, partly together with Mrs VINK).—1959–62. In the surroundings of Manokwari.—1963. *Centr. New Guinea*. Kubor Range Expedition<sup>3</sup> with R. PULLEN,

Western Highlands District (Minj, Kamang, Uinba, Nona-Minj Divide, Mt Kinkain, Mt Aas, Mt Kantz, Mt Milyin Kolyin up to 4040 m alt.) (June 17–Sept. 16).—1966. *E. New Guinea: Tari Subdistrict Expedition* with C. KALKMAN (see there), A. N. GILLISON, and D. G. FRODIN, mountains in the Southern Highlands District; and in *Telefomin*: Subdistrict on Mt Amdutakin, Hindenburg Range (Sept. 9–18).<sup>4</sup>—1968. *W. New Guinea*: Warsamson Valley, E of Sorong (May–June).



DE VOGEL

**COLLECTIONS.** BW nos in *Herb. Manokwari*, dupl. in *Leyden, Lae, Brisb., Canb., Bog.*; all from *W. New Guinea and nearby islands*, c. 1300 nos.

From the Arfak Mts (1962) c. 300 with expedition numbers SLEUMER & VINK; others with BW nos. Plants from the *Terr. of Papua & New Guinea 1960* in NGF series, at *Lae* and elsewhere; from 1963 and 1966 numbered VINK 16001–16583, and 16801–17642 respectively. 1st set in *Leyden*, 2nd *Lae*, 3rd *Canb.*

**LITERATURE.** (1) W. VINK: 'Verslag van een tournee van de sect. Bosbotanie naar Oost. Japen (Aisau)'. Report 1960.

(2) W. VINK: 'Botanical Exploration of the Arfak Mountains' (Nova Guinea, Bot. 22, 1965, p. 471–494, fig. 1–6, pl. 42–46).

(3) W. B. HITCHCOCK: 'An Introduction to the Natural History of a New Guinea Highland Community' (Emu 63, 1964, p. 351–372, map).

(4) C. KALKMAN & W. VINK: 'Botanical Exploration of the Doma Peaks and adjacent mountains in the Southern Highlands District, Territory of Papua, Australian New Guinea' (Report for 1966, Neth. Found. Advanc. Trop. Res. WOTRO, p. 50–52, 2 photogr.); 'Botanical Exploration in the Doma Peaks, New Guinea' (Blumea 18, 1970, p. 87–135, fig. 1(map)–5, photogr. 1–25).

**Viola, Miss V.**

Add: Instructor of Botany, University of the Far East, Manila.

**Vischer, Wilhelm**

(d. 1960, Basel, Switzerland).

Add: BIOGRAPHICAL DATA. Verh. Schweiz. Naturf. Ges. 140, 1960, p. 253–257, portr., bibliogr.; Verh. Naturf. Ges. Basel 72, 1961, p. 358–363, portr., bibliogr.; Rev. Algol. n.s. 7, 1964, p. 115–118, portr., bibliogr.

**\*Vlugt, P. J. van der**

visited Johore (*Malay Peninsula*) in Aug. 1968; collected living waterplants.<sup>1</sup>

**LITERATURE.** (1) P. J. VAN DER VLUGT: 'Nogmaals vier nieuwe exoten' (Het Aquarium 40, 1970, p. 280–284, 5 photogr.).

**\*Vogel, Eduard Ferdinand de**

(1942, Schiedam, Netherlands; x), biologist, educated at Leyden University, where he took his Master's degree in 1970; in Sept. 1971 he went to Bogor, Java, in charge of a 3-years development cooperation project on the study of primary forest tree seedlings, sponsored by NUFFIC. He founded a nursery for seedlings in the Bogor Botanic Gardens.

**COLLECTING LOCALITIES.** 1971. *SE. Borneo (Kalimantan Selatan)* with J. DRANSFIELD, K. KARTAWINATA, three assistants of the L.B.N., Bogor, and an assistant from the University of Bandjermasin: Proceeding from Bogor to Djaro near Muara Uja (Nov. 8), alluvial flat and hills around Djaro Dam (9–18), Batu Kumpai, limestone hill near Djaro (20), limestone hills around Djaro (21–22), alluvial flat around Djaro (23–24), proceeding to Gunung Sarempaka (25), Gunung Sarempaka (bivouac) (26), back to Djaro Dam (27), back to Bogor (Nov. 28–Dec. 5).—1972. *W. Java*: G. Gedeh-Pangrango, above Tjibodas (Feb. 2). *S. Sumatra* (with his wife I. DE VOGEL-RAVESTIJN, J. DRANSFIELD, and three assistants of L.B.N., Bogor): proceeding from Bogor to Selaman Enim, near Muara Enim (March 7–8), neighbourhood of Muara Enim (9–11), proceeding to Bukit Seburong, near Muara Dua (12–13), Bukit Seburong area (bivouac) (14–16), proceeding to Bandung Agung, along shore Danau Ranau (17), neighbourhood Bandung Agung and Balik Bukit near Kota Batu (18–19), return to Bogor, collecting 20 km SE of Martapura (20–21). *W. Java*: G. Gedeh-Pangrango, above Tjibodas (March 25); Dungus Iwul, about 10 km W of Kabupaten Bogor, on road Bogor-Labuan (Apr. 10). *Pulau Peutjang*, Udjon Kulon N.R., as guest of BIOTROP course Forest Ecology: proceeding to Pulau Peutjang (June 19–20), Udjon Kulon peninsula, path of lighthouse, Pulau Peutjang,

along beach, around guesthouse (21), transect 1, behind guesthouse (22), around transect Kartawinata (23), along beach and on flatland (24), flatland and marsh (25), hills and flatland (26), flatland (28), back to Bogor (29–30). *N. Sumatra* G. Leuser Reserve, Ketambe, N of Kota Tjane, partly with W. J. J. O. DE WILDE, his wife B. DE WILDE-DUYFJES, H. RIJKSEN and his wife (July 8–25): proceeding to Ketambe, on the way collecting in Sibolangit Botanic Gardens (July 8–9), G. Leuser Reserve, Ketambe, about 30 km N of Kota Tjane, surroundings of Alas valley (10–14), proceeding to G. Ketambe, in above-mentioned company, collecting along Lau Ketambe (15), ridge of G. Ketambe, 540 up to 1700 m (16), ridge to peaks of G. Ketambe (17–19), back to Ketambe, collecting along ridge and river (20), surroundings Alas valley (21–23), back to Bogor (24–25). *Pulau Peutjang*, Udjon Kulon Nature Reserve, with I. DE VOGEL-RAVESTIJN, J. F. VELDKAMP and his wife, and several others: proceeding to P. Peutjang (25–26), P. Peutjang (27–31), Udjon Kulon peninsula (Aug. 31–Sept. 1), back to Bogor. *Kalimantan Selatan*, with A. EVERAARTS and assistant of L.B.N., Bogor: Proceeding to Jaro (neighbourhood of Muara Uja) (Okt. 10–12), neighbourhood of Jaro Dam, alluvial flat and hills (13–14), Batu Kumpai, limestone hill (15), neighbourhood of Jaro Dam, alluvial flat and hills (16–18), proceeding to Gunung Sarempaka, bivouac (19), alluvial flat at foot of G. Sarempaka (20–24), side of G. Sarempaka up to ridge, limestone (22–24), alluvial flat (25), top ridge G. Sarempaka, bivouac, collecting on limestone ridges and a clay slope, up to 960 m, but unable to reach the top of G. Sarempaka (Oct. 26–Nov. 3), alluvial flat (Nov. 4–5), back to Jaro Dam (6), neighbourhood of Jaro Dam (9–10), back to Bogor (no collections (11–15)).—1973. *Kalimantan Selatan*: leaving Bogor (Mar. 3), proceeding to Jaro (5), staying 3 weeks in the same region as in Oct./Nov. 1972.

**COLLECTIONS.** > 1440 nos, 1st set *Bogor*, 2nd set at *Leyden*, next sets not yet sorted out. Of his most important collections the numbers run as follows: *Kalimantan Selatan* (1971): 700–1199, *S. Sumatra*: 1209–1349, Udjon Kulon Nature Reserve: 1363–1411, *N. Sumatra*: 1413–1568, *Kalimantan Selatan* (1972): 1585–2142.

**Voogd**, Cornelis Nicolaas Abraham de  
(d. 1970, Wassenaar, Netherlands).

**BIOGRAPHICAL DATA.** Fl. Mal. Bull. no 25, 1971, p. 1879–1880.

**Vorstman**, Adriana Geertruida

(d. 1963, Amsterdam, Netherlands).

Add: Limnologist. The collections in Rawah Bening were made with Dr J. H. COERT (see there). On the labels her name is misspelled FORSTMAN.

**BIOGRAPHICAL DATA.** Vakbl. Biol. 43, 1963, p. 89–91.

**\*Wade**, Leslie Keith

(1940, Vancouver, B.C., Canada; x), phytosociologist, B.Sc. (1963) and M.Sc. (1965), University of Columbia. In summer 1963 taking part in an expedition to the western Canadian Arctic with Prof. V. S. KRAJINA. He started his

postgraduate studies at the Australian University of Canberra, and spent a period in New Guinea for the phytosociological study of the alpine and subalpine vegetation of Mt Wilhelm under Dr D. WALKER (see there).<sup>1</sup> He later returned to Canberra to complete his thesis for a Ph.D.

**ITINERARY & COLLECTING LOCALITIES.** *E. New Guinea* (May 1966–July 1967), mostly on



D. WALKER

Mt Wilhelm, but also on Mt Giluwe, Upper Sirunhi and Chimbu Valley. Also visiting Bougainville (Solomons), Lake Iriste area (*Papua*), Mt Giluwe in the Southern Highlands, at Lae (2 months herbarium work), and making short trips to Mt Kainde, Wau, Bulolo, and Madang.

**COLLECTIONS.** *Herb. Lae*: ANU nos 7000–7794; dupl. will be deposited in *Canberra*, *Leyden*, *Kew*, and *Arn. Arbor*.

**LITERATURE.** (1) L. K. WADE & D. N. MCVEAN: 'Mt Wilhelm Studies I. The alpine and subalpine vegetation' (Res. School Pacif. Stud. Dept. of Biogeogr. & Geomorph. Publ. BG/1, 1969, 325 pp.; Austr. Nat. Univ. Press).

**Wakefield**, Norman Arthur

(d. 1972, near Melbourne, Vict., Australia).

**BIOGRAPHICAL DATA.** Vict. Natur. 90, 1973, p. 103–105.

**\*Walker**, Donald

(1928, Dewsbury, England; x) graduated B.Sc. in Botany (Hons 1949) at Sheffield University, M.A. (1952) and Ph.D. (1953) at Cambridge University. University Sub-department of Quaternary Research, Cambridge, and Clare College Cambridge (1949–60), interrupted by military service in Malaya (1953–55); Professorial Fellow

in Biogeography (1960–68) and Professor of Biogeography (1969– ), Research School of Pacific Studies, Australian National University, Canberra.

**COLLECTING LOCALITIES.** Highlands of *Australian New Guinea*:<sup>1</sup> Wabag-Laiagam, and Mt Wilhelm mainly, in 1961 (4 weeks), 1962 (5 months), 1965 (3 months), 1967 (6 weeks).

**COLLECTIONS.** Made only in relation to ecological and pollen-analytical work. Actual collecting, label composition etc. is done largely by Mrs PATRICIA M. WALKER. In *Herb. C.S.I.R.O., Canberra*, from where the duplicates are distributed. About 1200 numbers, all numbered in the ANU series (between 1 and 1499, 5000 and 5499).

**LITERATURE.** (1) Author of: 'Stratigraphy and ecology of a New Guinea Highlands' swamp' (in Proc. UNESCO Humid Trop. Symp. Kuching 1963, 1965); 'Vegetation of the Lake Ipea Region, New Guinea. I. Forest, Grassland and Garden' (in J. Ecol. 54, 1966); 'A commentary on botanical data from New Guinea, Australia and New Zealand' (in R. Meteorol. Soc. Proc. Internat. Symp. on World Climate from 8000–0 B.C. 1966); 'A reconnaissance of the non-arboreal vegetation of the Pindaunde catchment, Mount Wilhelm, New Guinea' (in J. Ecol. 56, 1968, p. 445–466, fig. 1–5, tab. 1–2).

**Walker, George Warren**

**COLLECTIONS.** Add: Dupl. in *Herb. Edinb.* (ex *Herb. Glasgowl*).

\***Walker, Patricia M.**, see D. WALKER.

\***Walker, Trevor George**

(1927, York, England; x), educated at Leeds University, B.Sc. Hons Botany (1952), Ph.D. (1956). From 1956–59 Temporary Assistant Lecturer in Botany, Leeds University, and in this period 1 year at the University of the West Indies as an Exchange Lecturer; since 1959 Lecturer in Botany, University of Newcastle upon Tyne.

He made expeditions to Ceylon (1954), Jamaica (1958, 1962, 1963), Trinidad (1963, 1966) and to New Guinea (see below).

He collected material for cytological, anatomical and evolutionary studies on tropical ferns.

**COLLECTING LOCALITIES.** *East New Guinea*. 1964–65. With the *British Museum-Newcastle upon Tyne Expedition*. For foot patrol into Finisterre Mts see itinerary and literature under C. D. SAYERS, and A. C. JERMY. In 1965 around Lae, in the Herzog Mts, Eastern Highlands District, at Keglsugl and Mt Wilhelm. During 3 weeks (from Feb. 21) attached to a Forest Dept Survey in southern *New Britain*.

**COLLECTIONS.** Mainly ferns, nos T 7414–10285 from *New Guinea* and *New Britain* (T 10014–10285) in *Herb. Newcastle*; dupl. will be distributed to various herbaria. Many living plants sent back to England for study.

**Wallich, Nathaniel**

Add: He laid out the first Botanic Garden in Singapore in 1822; it was subsequently abandoned during the 1830s (inf. i.l. by J. BASTIN, July 1970).

**COLLECTIONS.** At the end add: Letters relating to the establishment of the Botanical

Garden in Singapore have been reproduced by R. HANITCH (J. Str. Br. R. As. Soc. 65, p. 39–48; reprinted J. Mal. Br. R. As. Soc. 42, 1969, p. 145–154).

**Walsh-Held, Maria Ernestine**

(see Cycl. Fl. Mal. I, 1, 1950, p. 559, 606).

(d. 1973, Geneva, Switzerland)

Add: In March 1958 she repatriated to Switzerland.

**Ward, Frank (or Francis) Kingdon**

(b. 1885, Withington, Lanc., England; d. 1958, London, ashes buried at Grantchester, England).

Add: Numerous plants have been named after him, e.g. the genus *Kingdon-Wardia*, and several species.

**BIOGRAPHICAL DATA.** Add: Everybody: Weekly, Nov. 1, 1952, with photogr.; in F. KINGDON-WARD: 'Pilgrimage for Plants', 1960, p. 11–18, incl. summary on 'Travels and Collections, and bibliogr. (l.c. p. 181–186).

\***Warent, H.**, see Boswezen Nieuw Guinea.

\***Waring, P.**

collected plants in *Papua* with COODE etc.

**COLLECTIONS.** *Herb. Lae*; dupl. *Herb. Edinb.*

\***Warner, John Northrup**

(1919, Los Angeles, Cal., U.S.A.; x) was educated in the Universities of Hawaii (B.S. 1941) and Minnesota (Ph.D. 1950, Plant Genetics and Statistics). From 1941 to present employed by the Experiment Station of the Hawaiian Sugar Planters' Association, at present Senior Geneticist. For his visits to New Guinea see respectively *sub* J. H. BUZACOTT and C. O. GRASSL.

\***Wasli bin Haji Sisi**, see Forest Dept Sarawak.

**Waterstradt, Johannes (John)**

Add: According to BARLOW's biography (see below) he repatriated in 1904, taking over his father's market gardening business, specially in orchids. He returned to the East in 1908 and 1912, visiting Mt Kinabalu again.

From W.'s diaries it is apparent that he took a passage to Australia not before 1890 or early 1891, and started collecting with the Germans in Ceylon in the middle of 1891.

**COLLECTING LOCALITIES.** (Emended after BARLOW, i.e. after W.'s diaries). 1891. Ceylon: *Penang* and *Singapore*; *Labuan* (end Oct.); *Brunei*, trip up the Padas R.—1892. *N. Borneo*: vicinity of the mouth of the Lawas R.; Mt Kinabalu (May–June), based at Kiau.—1893. Back at Kiau (Jan.–end of Mar.).—1894. Kudat (Jan. 23) and by boat to Banggi (? *Banguet I.*) (till end of Mar.). *Philippines*: *Balambangan*, *Balabac*, and *Palawan*. Return to *N. Borneo*: Kudat (end of May), and *Labuan* (June 1). Expedition up the Lawas and Limbang Rivers (*Brunei*); *Labuan* (Oct.); return to Mt Kinabalu, based at Kiau again, visiting the Marei Parei ridge, returning to the coast on Dec. 31.—1895. Short expedition to Kinabalu (Mar.) and to *Palawan*, returning Aug. 2.—1896. In March sending native collectors to Kinabalu for

insects, while he went to Mengalung for 2 months.—**1899.** Back in *Labuan* after 6 months in Europe; heavily involved with oil concessions and prospecting in *Brunei*, he arranged for collectors to go to *Ternate*, *Halmahera*, *Batjan*, and *Obi*.—**1901.** *Malay Peninsula*: ascent of G. Tahan (May–Nov.);<sup>2</sup> early Dec. back in *Labuan*.—**1902.** Trip to *Brunei* (end of Jan.); to *Sulu Is.* (Jolo) via Sandakan; leaving (Feb. 27) for *Mindanao*: Zamboanga, and by steamer to *N. Celebes*: Menado, collecting in that island and in *Obi* (2½ months) before continuing to *Batjan*, based at Labuha; leaving *Batjan* (Sept. 1), spending 6 weeks on *Halmahera* and surrounding islands (*Moluccas*), and the remainder of the year at Saonek in *Waigeo*.—**1903.** Leaving *Halmahera* (end of Feb.) for *Ternate*, and thence to *Ambon*. Because of impaired health return to *Labuan*. *N. Borneo*: Mt Kinabalu, Kiau (June 12–July 29); back to *Labuan*. *Mindanao*: Davao (till end of the year), travelling in the S. part of the island, climbing Mt Apo up to c. 6000 ft.—**1904.** *Labuan* (Jan.); *E. Java*: Soerabaja (till end of March); back to Europe.—**1908.** *N. Borneo*: Mt Kinabalu.—**1912.** Mt Kinabalu.

**COLLECTIONS.** According to BARLOW the majority of his orchid collections before 1904 went to HUGH LOW & Co. in London. He made extensively use of native collectors.

**BIOGRAPHICAL DATA.** H. S. BARLOW, J. Mal. Br. R. As. Soc. 42, 1969, p. 115–129, 1 pl.

#### \*Weber, Bruce

American botanist educated at the University of Cincinnati. In June 1965 attached to the Sabah National Park Service and Forest Department in *N. Borneo* for two years. Collections?

#### \*Weber, W. A.

collected mosses and lichens in *E. New Guinea* under D. WALKER; in the ANU series of the Australian National University; *Herb. Canberra*. In 1969 he accompanied Dr B. O. VAN ZANTEN (see there) on his trip in *E. New Guinea* (June–July).

#### \*Wells, J.

A Cadet Forest Officer who collected briefly (about 1957) at Bulolo, Morobe District, *E. New Guinea*; in *Herb. Lae*.

#### Wells, T. H.

(see Cycl. Fl. Mal. I, 1, 1950, p. 566) a farmer of the Childers District in Queensland, was commissioned by the Bureau of Sugar Experiment Station at Brisbane, to visit SE. New Guinea for a sugar-cane collecting trip, making Sogeri his point of departure.

**ITINERARY.**<sup>1</sup> 1912. Left Brisbane (Sept. 2); from Sogeri to the Laloki River, Kemp Welch River and Rigo; leaving Papua in Nov.

**COLLECTIONS.** Varieties of sugar-cane. Only few material will have been dried, if any.

**LITERATURE.** (1) *Cf. Hawaiian Plant. Rec.* 55, 1958, p. 213; *Cane Growers' Quart. Bull.* Brisbane 15, 1951, p. 39–40.

#### Went, Frits Warmolt

Add: For some years Director of the Missouri Botanical Garden. In 1964 he accepted a professor-

ship at Reno, conducting studies on desert plants and others as well.

In Sept. 1962 he visited Mt Wilhelm in *E. New Guinea*.<sup>3</sup>

**LITERATURE.** (3) F. W. WENT: 'A botanist's explorations in Australia and New Guinea' (*Mo. Bot. Gard. Bull.* 51, 1963, p. 10–17, 3 fig.).

#### Wenzel, Chester A.

**COLLECTIONS.** Add: Also dupl. *Philippines* (1913) in *Herb. Edinb.*

#### Werner, Eugen

**COLLECTIONS.** Add: Also dupl. in *Herb. Edinb.*

#### \*Wheeler, Josselyn

student, working under Dr D. WALKER (see there) and collecting plants in *E. New Guinea*.

In May 1966 he worked in the Eastern Highlands.

**COLLECTIONS.** In *Herb. Univ. Canberra*, numbered in the ANU series (see there); considerable collection.

#### \*White, S. R. J.

made a collection of seeds, when travelling through Indonesia to Singapore, for W. H. LEWIS.<sup>1</sup> They were collected in *Java*: Bandung, *Timor*: Atambua, *Singapore*.

**COLLECTIONS.** Seeds of *Oldenlandia corymbosa* L. (= *Hedyotis corymbosa* (L.) Lamk). Not known whether he made other collections. The plants resulting from the seeds were given LEWIS numbers.<sup>1</sup>

**LITERATURE.** (1) W. H. LEWIS: 'Chromosome numbers of *Oldenlandia corymbosa* (Rub.) from Southeastern Asia' (*Ann. Mo. Bot. Gard.* 53, 1966, p. 257–258).

#### \*Whiteman, P. C.

a member of ANZDEC (Asian New Zealand Development Consultants) team, deposited some specimens collected during tours (localities etc. see under D. W. IVES) in *Herb. Bog*.

#### \*Whitmore, Timothy Charles

Add: Took his Ph.D. in 1960, and in the same year collected in Ecuador with the Oxford University Expedition. From Sept. 1962–Sept. 1964 Forest Botanist in the British Solomon Islands; from Sept. 1965–Apr. 1972 Forest Botanist under the Colombo Plan at Kepong, Malaysia, specially in connection with the work for the 'Tree Flora of Malaya', interrupted by a stay at Cambridge and Kew (1968/69), and a visit to the New Hebrides and the British Solomon Islands (Feb.–May 1970).

He definitely left Malaya mid-April 1972, repatriating after a fortnight of palm collecting in Peninsular Thailand.

His thesis and earlier publications mainly on bark morphology, but author of numerous others on systematics,<sup>1</sup> plant geography, conservation,<sup>2</sup> ecology, and miscellaneous subjects. Co-editor of an issue on National Parks, and chief editor of the 'Tree Flora of Malaya'.<sup>3</sup>

*Whitmorea* SLEUMER has been named after him. **COLLECTING LOCALITIES.** (emended), 1957. *Singapore* with visits to SE. Johore and Pulau Mangrove Reserve (Jan. 5–Mar. 22). *Malaya*: Selangor, For. Res. Inst. Kepong; Kanching,



Serendah and Semangko For. Reserves (23-31); Perlis, S. Kedah and *Penang* (31-Apr. 8); Perak, Maxwell's Hill, Taiping; Bubû F. R., Kuala Kangsar; Lumut locality; Piah and Keladang Siong For. Reserves, Ipoh (9-16); Perlis (22-26); Selangor, F.R.I. Kepong (28-May 11); Negri Sembilan, Sungei Menyala F. R., Port Dickson (12-20); Negri Sembilan, Kuala Pilah Distr. (21-26); Selangor, Bt Lagong F. R. (27-June 9); Pahang, Kuantan Distr. (12-21); Trengganu, Bt



WHITMORE

Bauk F. R., Dungun (22); Kuala Trengganu Distr. (23-24); Johore, Mersing Distr. (July 18-Aug. 2). *NW. Borneo, Sarawak*: Kuching Distr. (Aug. 19-28); *Brunei*: Temburong Distr. (29-Sept. 14), Belait Distr. (Sept. 15-Oct. 4); *N. Borneo: Labuan I.* (Oct. 5-7); Lungmanis felling concession, 30 miles W of Sandakan (Oct. 8-12); around Sandakan (13-15); Kalabakan felling concession, 40 miles W of Tawau (16-25). *Malaya* (Nov. 13-20): Selangor, Kanching, Serendah, and Sungei Lallang For. Reserves.—1962-64. In the Solomon Islands.—1965. Joined in Royal Society Expedition to Solomon Is. (July-Sept.) (cf. CORNER).—1966. *Malay Peninsula*: Pahang, Jengka F. R. & Kemasul F. R. (Feb.); Johore, Labis F. R. (Apr.); *P. Penang* (May); Selangor, G. Bunga Bua (May); Kedah & Perlis (July); Ulu Perak (July); Perak, G. Bubû (Aug.); *Sarawak*, Semengoh (Aug.); Perak, Slim Hills F. R. (Sept.); Perak, Kinta Hills (Oct.); Selangor, Genting Highlands (Nov.); Cameron Highlands (Dec.).—1967. Perak, G. Bubû, Lumut F. R. and *Pangkor I.* (Feb.); Pahang, G. Benom (Mar.);<sup>4</sup> Pahang, Kuala

Lompat (Apr.); W. Pahang and N. Johore (May); Selangor, Genting Highlands (May & June); Trengganu, Bt Bauk F. R. (June); Pahang, Tasek Bera and Palong F. R. (July); Kelantan near Gua Musang and Ulu Nenggiri (July); Kelantan, Ulu Lebir and Ulu Aring (Sept.); Selangor, Genting Highlands (Nov.).—1968. Kedah, G. Inas F. R. (Feb.); Pahang, Taman Negara including G. Tahan (Feb.-Mar.);<sup>5</sup> Johore, Lenggur F. R., Kluang F. R. and G. Belumut (May); Kelantan, Kemahang F. R. (June); Trengganu, *Mandi Angin Expedition* (July 1-18); Selangor, G. Nuang (Aug.).—1969. Johore, G. Ledang (Mt Ophir) (July); Kelantan, G. Stong (Aug.); Trengganu, *G. Padang expedition* (Sept.); *Java*: Tjibodas (Sept.); Pahang, Bt Tapah, K. Lompat and Maxwells Hills in Perak (Nov.); *Langkawi Is* (Dec.).—1970. Negri Sembilan, Sg. Menyala F. R. (June); Pahang, Taman Negara, Ulu Sat, Ulu Sepia (July); Pahang, Cameron Highlands (Sept. and Oct.); Tapah Hills (Oct.).—1971. Ulu Sungei Perak (Jan.); SW. Pahang and border Johore (Feb.); Pahang, Kuala Lipis to Cameron Highlands (May-June); Pahang, Taman Negara, and Trengganu, Ulu Sg. Trengganu (June); Trengganu, Kemaman, Perak and Taiping, Pahang, Fraser's Hill (Aug.); *P. Penang* (Oct.).—1972. Ulu Sg. Trengganu (Feb.); S. Kelantan, G. Rabong (Mar.).

Small trips with few collections have been omitted; above-mentioned trips have partly been made with DRANSFIELD,<sup>6</sup> SHAH, or COCKBURN.

**COLLECTIONS.** Add: Collections 1957, numbered TCW 1-686, distributed to *Sing.*, *Cambr.*, and *Leyden* (when fertile). General *Malaysian* collections (1965-72), mainly trees, numbered in the new FRI series (1-1000, 3001-4950, 8501-9000, 12001-13000, 15001-16000, 20001-?) *Herb. Kepong*, principally distributed to *Kew*, *Leyden*, *Sing.*, *Arn. Arbor.*, *Bog.*, *Cambr.* An important palm collection at *Kepong*, with virtually no dupl. In Malaya he especially collected in under-collected or/and hard to visit places.

Collections from *Borneo* to *Herb. Kuching* and *Sand.* too; few numbers collected jointly with J. A. R. ANDERSON (see there) numbered in the Sarawak series; from Brunei joint collections with P. S. ASHTON, numbered BRUN 389-700, distributed by ASHTON (see there).

In the Solomons (1962-64) about 4000 collections were made; during the Roy. Soc. Exp. (1965) numbered in the RSS series, in 1970 with TCW nos. Collections from Ecuador, New Hebrides, B.S.I.P. (1970) and Thailand in the TCW series.

**LITERATURE.** (1) Papers, but also a book: 'Palms of Malaya' (Oxford Univ. Press 1973).

(2) (with E. SOEPADMO & A. HO): 'National Parks of Malaysia' (special issue of *Mal. Nat. J.* 24, 1971, p. 111-262).

(3) In which besides author of numerous families (Publ. by Longman, London, 1972- ).

(4) T. C. WHITMORE: 'An outline of the Forest Zones on northeast Gunung Benom' (*Bull. Br. Mus. (Nat. Hist.)* 23, no 2, 1972, p. 11-15). See also 'Introduction' by LORD MEDWAY, *l.c.* p. 3-7, 2 maps, and paper on bryophytes and filmy ferns by ANNE JOHNSON, *l.c.* p. 17-20, and photographs by LORD MEDWAY.

(5) J. DRANSFIELD & T. C. WHITMORE: 'Palm hunting in Malaya's National Park' (*Principes* 13,



1969, p. 83–98, 16 fig.); 'A Podostemaceae new to Malaya, *Indotristicha malayana*' (Blumea 18, 1970, p. 152–155, pl. 1, fig. 1).

**\*Wieringa, Wabe**

(1904, Rauwerd, Fr., Netherlands; 1965, Leyden, Netherlands) who worked for a short period at Wageningen, was attached to the technical staff (finally Head) of the Rijksherbarium at Leyden from Dec. 1928 onwards. From July 1949–Jan. 1956 he was placed at the disposal of the Buitenzorg Herbarium (interrupted by a leave in 1952), in which period he distributed thousands of duplicates to the more important herbaria.

**COLLECTIONS.** He collected a few plants with J. H. KERN (see there) in the vicinity of Bogor, W. Java, numbered in the latter's series.

**BIOGRAPHICAL DATA.** Blumea 13, 1966, p. 175–176, portr.

**Wiesenthal, Franz**

Add: **BIOGRAPHICAL DATA.** In STREIT & DINDINGER, Bibl. Missionum 21, 1955, p. 533–534, bibliogr.

**Wilde, André Gerard de**

Add: (b. 1925), M.D., Ph.D. medicine. Later on the staff of the Anatomical-Embryological Laboratory of Leyden University, joined the Dutch New Guinea Expedition to the Sterrenbergte as a Physical Anthropologist in 1959. Since 1963 Professor and Director of Anatomy and Embryology, University of Groningen.

**COLLECTING LOCALITIES.** 1959. Dutch Centr. New Guinea: Sibil Valley, Hollandia-Sentani (N. coast), Tsjop and Ok Bon Valley.

**COLLECTIONS.** Some plants (incl. mosses) with the collection of B. O. VAN ZANTEN, and C. KALKMAN (see there), in *Herb. Leyden*.

**BIOGRAPHICAL DATA.** 'Who's Who in Science in Europe' 1, 1967, p. 414.

**\*Wilde, Jan Jacobus Friedrich Egmond de**

(1932, Heemskerk, N.H., Netherlands; x) graduated in tropical forestry at Wageningen Agricultural College in 1958. Subsequently in the army for his number and in May 1959 sent to Biak near Dutch New Guinea as a lieutenant in the reserve. After return he joined the Laboratory for Plant Taxonomy and Geography at Wageningen, working on African *Meliaceae*.

**COLLECTING LOCALITIES.** 1959–60. Biak, N. of W. New Guinea. In Feb. 1960 at Manokwari, Oransbari etc. in NW. New Guinea.

**COLLECTIONS.** Nos 1–1071 collected at Côte d'Ivoire French W. Africa. In Malaysia, Biak nos 1150–1249 (before Feb. 1960), 1258–59, in New Guinea nos 1250–57 collected by Prof. Dr J. F. KOOLS at Enarotali (Wisselmeren); *Herb. Wageningen*. 76 dupl. (incl. single specimens) from Malaysia in *Herb. Leyden*. Living orchids and seeds are cultivated at Wageningen.

**\*Wilde, Willem Jan Jacobus Oswald de**

(1936, Heemskerk, Netherlands; x), botanist, educated at Leyden University (Ph.D. 1971). From 1960–1961 Assistant of the Rijksherbarium, Leyden; in 1962 working on the CARMABI (Caribbean Marine Biological Institute), Curaçao;

1963–1966 staff member Agriculture University Wageningen (while in Africa for International Technical Assistance, The Hague); since 1966 staff member Rijksherbarium, Leyden.

From his stay in the Cameroons (1963) onwards he invariably collected together with his wife, née Duyffjes, Brigitta Emma Elisabeth (1936, Bandung, Indonesia; x), botanist, educated at Leyden University; presently at Agricultural University Wageningen, working on North African *Allium*.



W. J. J. O. DE WILDE

Author of taxonomic papers on *Najadaceae*, *Saraca* (Caesalpinaceae) and *Passifloraceae* (thesis on the genus *Adenia*), and of reports on the Netherlands Biological Expedition to Turkey (1959).

**COLLECTING LOCALITIES.** 1972. Indonesia. N. Sumatra: Atjeh. Exploration Gunung Leuser Nature Reserves: Ketambe area (Orang Utan Orphanage) (c. 300 m) (May 15–June 16); climbing G. Bandahara (17–28), large 'blang' c. 2800 m (25); Ketambe area (June 29–July 5); Pematang Siantar, Prapat (Lake Toba) and G. Batu Lopang (E of Prapat) (July 8); Ketambe area (9–14); climbing G. Ketambe (2200 m) (15–20); Ketambe area (July 21–Aug. 1); expedition into the interior, SW of G. Ketambe (up to c. 2700 m), also climbing again G. Ketambe (c. 2200 m) (3–18); Ketambe area (Aug. 19–Sept. 3).

**COLLECTIONS.** Sumatra collections in *Herb. Leyden* (G. Leuser nos 12000–13488, 13564–14456; Pematang Siantar, Prapat, G. Batu Lopang, nos 13489–13563); dupl. in *Herb. Bog.* Plants from Turkey, 1959 (2154 nos) also in Leyden.

African collections (1963–66) all in Wageningen, >10,000; numbered from 1 onwards.

LITERATURE. (1) A report will be published in Fl. Mal. Bull. and in Mal. Nat. J.

BIOGRAPHICAL DATA. Curr. vitae in Thesis Leyden, 1971, p. 3-4.

Wiljes-Hissink, Elisabeth Adrienne de

COLLECTIONS. Add: In *Herb. Wageningen*: 35 nos collected in *Ambon* and *Ceram* (Seram).



MRS. B. E. E. DE WILDE-DUYFJES

\*Willemse, Reinierus Hendrikus

(1938, Haarlem, Netherlands; x) schoolteacher at a MAVO (highschool) at Velzen, collected about 10 plants, mainly *Labiatae*, in *E. Java* and *Bali* in mid-July 1970; in *Herb. Leyden*.

Williams, Robert Statham

COLLECTIONS. Add: Also dupl. in *Herb. Edinb.* (1905).

\*Willis, James Hamlyn

(1910, Oakleigh, Vict., Australia; x), botanist, B.S. University of Melbourne (1939). In 1972 he retired as Director of the Melbourne Herbarium.

COLLECTING LOCALITIES. 1970. *E. New Guinea*: Mts Wilhelm and Giluwe (June/July).

COLLECTIONS. *Herb. Melbourne*: ±500 phanerogams, bryophytes, lichens and fungi from *New Guinea*.

Wind, Rutger

(d. 1964, The Hague, Netherlands).

\*Wing, James A., see Forest Dept North Borneo.

Winkler, Hans

BIOGRAPHICAL DATA. Add: Mitt. Staatsinst. Allg. Bot. Hamburg 11, 1957, p. 7-8.

Winterbottom, James Edward

Add: From 1834 onwards he made almost annually tours in Europe. From 1846-49 he travelled in company of Capt. STRACHEY (later Sir RICHARD) to India, Further India, China, Kashmir, Tibet, Nepal, and the Indian Archipelago. Early 1854 he started his tour to the Near East.

ITINERARY. Leaving England (Jan. 4, 1846) for Bombay. As it proved too late for a trip to the Himalaya, he determined to go on to *Java* (arriving June 20), and after making excursions about the island, returned at Batavia on July 24; by steamer (27) to *Singapore* (arrival Aug. 1). With the China mail to Hongkong and up the coast to Shanghai, returning by the same route to *Singapore*, proceeding to India and the Himalaya; home (about April 1849) by way of Egypt, Malta, and Gibraltar.

COLLECTIONS. Add: Also in *Herb. Edinb.* from *Java* (1846).

BIOGRAPHICAL DATA. Add: Lond. J. Bot. 6, 1854, p. 345-349; Bonplandia 2, 1854, Nov. 15, p. 265.

\*Winters, Harold Franklin

(1913, Nowata, Oklahoma, U.S.A.; x) was educated at Oklahoma State University at Stillwater (B.Sc. horticulture 1940), at Ohio State University, Columbus (M.Sc. horticulture 1942); graduate studies in Botany at the University of Maryland, College Park (1962-67). Assistant Orchard and Nursery Inspector for State of Oklahoma (1942-43); Horticulturist, Fed. Exp. Station U.S. Dept of Agric., Mayaguez, Puerto Rico (1943-56); from 1956 with the New Crops Research Branch, Plant Science Div., Agric. Research Service, U.S. Dept of Agric., Beltsville, Maryland.

During the New Guinea Expedition 1970 he was assisted by Dr JOSEPH J. HIGGINS (see there), collecting materials of possible ornamental value. The expedition was sponsored jointly by the Agricultural Research Service of the U.S. Dept of Agric. and Longwood Gardens, Kennet Square, Pennsylvania.

ITINERARY. 1970. *Australian New Guinea*. Travelling by way of Hawaii, New Caledonia, and Brisbane, to Lae (Jan. 17-18); at Wau, Mt Kaindi, Edie Creek, Meri Creek (19-22); Patep village (24-26); Aiyyura and Kassam Pass (Feb. 2-5); Markham River Valley near Lae (9-11); Mindik and Oreganum villages, Huon Peninsula (12-17); Botanic Garden Lae (19-24); Goroka (26-27); Chimbu country near Kundiawa, Mt Ekuam and Mt Hagen (Mar. 6); Mt Hagen area, Mt Kum, Baiyer R., Wabag Rd and Wahgi Valley (7-13); Lae (14-21); Port Moresby area, Brown R., Rouna Falls and Sogeri (22-31). *Philippines*, *Luzon*: Mt Makiling and cultivated plants from Univ. of the Philippines (Apr. 2-5); Bot. Garden *Singapore* (7); visit to the Institute for Horticultural Research at Djakarta, and the Botanic Gardens at Bogor and Tjibodas, in *W. Java, Indonesia* (9-13).

COLLECTIONS. A new series, WINTERS & HIGGINS, was started, 873 nos, amongst which several *Ericaceae*. *Rhododendron* species identified

by Dr H. SLEUMER. In *Herb. U.S. Nat. Arbor. Wash.*; dupl. of *Ericaceae* in *Herb. Leyden*.

BIOGRAPHICAL DATA. Amer. Men of Science 11th ed. vol. 6, 1967, p. 5923.

**\*Wirawan, Nengah**

(1941, Tabanan, Bali, Indonesia; x) graduated from the College of Agriculture at Tjiawi, Bogor (B.Sc. Botany in 1962); Assistant Botanist of the Herbarium Bogoriense; 1965–67 Head of the Mountain Garden Tjibodas, and in those years part-time student in biology at the Bandung Institute of Technology; since May 1967 full-time student.

COLLECTING LOCALITIES. 1960. *W. Java: Peutjang I.* and Udjong Kulon Nature Reserve (2 weeks with KOSTERMANS).—1961. *Sumbawa* with KOSTERMANS (see there) (Apr. 8–May 25); *W. Java*: Mt Hondje near Tamandjaja in Banten (= Bantam) (Dec.–Jan. 1962, 10 days).—1963. Tjigenter and Tjilintjing, Udjong Kulon Nature Reserve (Apr. 13–27); Udjong Kulon Nature Reserve: Mt Pajung,<sup>1</sup> trail from Tjibunar—Sangiang Sirah (Dec. 25–Jan. 22, 1964).—1964. *Peutjang I.* (Jan. 23–29); *Bali*: southern slope of Mt Batukau (Tabanan), from Pura Luhur, near Wongaja Gede, and summit Mt Batukau (July 18–21).—1965. *Flores* with KOSTERMANS (see there): Waingapu (*Sumba*), near the harbour and the village Kembeniru (Apr. 4–5), Ende, Mt Wongge (–7), Mborong, S. coast W. Flores (8), stay at Kissol and on Mt Ndeki (9–14), Wae Rana (15), to Mbero and Nangarawa (16–17), Mbengan F. R. (19), Wae Rana-Kissol-Ruteng-Mano (20–23), N. slope Mt Ranaka-Mandosawu complex (24–30), Mt (Potjo)Likang, S of Ruteng (May 2–3), Ruteng-Wae Mao Base, near Rana Mese (4), vicinity of Rana Mese (5–10), Wae Mao-Ruteng (11), road Ruteng-Pongkor and Mt (Potjo) Reok, S of Ruteng (13–14), Ruteng-Rio, N. coast W. Flores (18), Ponto II F. R. (19–20), vicinity of Reo (21–24); leaving Reo for Surabaya (26).

COLLECTIONS. About 500 *nos* and 969 joint numbers with KOSTERMANS (K. & W. 1–969) from the *Flores* Expedition. Mostly in 6–10 sets, deposited in *Herb. Bog.*, *Leyden*, *Kew*, *Sing.*, *Paris*, *Wash.*, *Leningr.*, etc.

LITERATURE. (1) WIRAWAN: 'Beberapa tjatatan mengenai keadaan vegetasi G. Pajung, Udjungkulon' (Notes on the vegetation of Mt Pajung, Udjungkulon) (Laporan Seminar Biologi Pertama Tjiawi (Bogor) 1965, p. 247–257).

**Wit, Hendrik Cornelis Dirk de**

Add: Onwards of Nov. 1953 Lecturer, later (1959) Professor of Botany at Wageningen. He has specialized in African botany and in aquatic plants.

*Crudia dewittii* KOSTERMANS has been named after him.

**Witsen, Nicolaas C.**

Add: He also had plants drawn in Japan, China, and Africa (cf. F. DE HAAN, Priangan, 1, 1910, Pers. p. 282–284).

**Woerden, Corneille Leon Lambert Henri van**

(d. 1970, Utrecht, Netherlands). Add: Repatriated in 1952; settled at Groenekan near Utrecht, and in the employ of the Genetical

Institute of the University at Utrecht from 1953–69.

BIOGRAPHICAL DATA. Fl. Mal. Bull. no 25, 1971, p. 1880.

**\*Wolff, Torben Lunn**

(1919, Copenhagen, Denmark; x) was educated at the University of Copenhagen; Cand. mag. (zoology) 1947. He was a member of the Atlantide Expedition to West Africa 1945–46, the Galathea



WIRAWAN

Expedition 1950–52, and the Danish Rennell Expedition 1951.<sup>1</sup>

With the *Noona Dan Expedition* (see there for Itinerary, Collections, etc.)<sup>2</sup> he collected some botanical specimens in Yalon (*Mussau, Bism. Arch.*) and Rennell (Solomon Is.) in 1962. In 1965 and 1966 some more specimens in the Solomons.

LITERATURE. (1) Author of 'The Natural History of Rennell Island' (1955).

(2) T. WOLFF: 'The Noona Dan Expedition' (Nature 198, 1963, p. 1044–1045).

**Womersley, John Spencer**

COLLECTING LOCALITIES. Add: In the following years several local trips were made; in Nov. 1959 short visit to *West New Guinea*.—1966. Ramu Valley with E. E. HENTY; Wau area, foothills of Giluwe, S. Highlands with K. R. WOOLLIAMS; Okapa area, E. Highland Distr. with COODE.—He will have certainly occasionally collected later.

LITERATURE. (2) Add: with J. B. McADAM: 'The Forests and Forest Conditions in the Territories of Papua and New Guinea' (prep. for the Brit. Commonwealth For. Conf. in Austr., 1957, Port Moresby).

**Wong, Y. K.**, see Forest Dept North Borneo.

**Wood, Devillo D.**

Add: In 1969 he lived in California.

**Wood, Geoffrey Howorth Spencer**

BIOGRAPHICAL DATA. Add: Proc. Linn. Soc. Lond. 169th sess., 1958, p. 38-40; Gard. Bull. Sing. 17, 1960, p. 498-501.

\***Woods, M. G.**

collected in the KL series of the Phytochemical Survey of the Federation of Malaya, Kuala Lumpur, in S. Pahang, in March 1959.

\***Woods, Patrick (Paddy) James Blythe**

(1932, Ballinderry, Co. Antrim, N. Ireland; x) attended a course for student gardeners at the Royal Botanic Garden, Edinburgh (1953-56) and was awarded the Diploma in Horticulture (DHE); joined the staff as a Scientific Assistant to B. L. BURTT; at present Experimental Officer, currently working with the latter on Old World *Gesneriaceae* particularly on the genus *Aeschynanthus*, and on New Guinea *Orchidaceae*. In 1962 he accompanied BURTT to Malaya and Sarawak. His New Guinea trip was financed by Mr GEOFFREY ELWORTHY, an Australian, who wishes to encourage taxonomic work on *Orchidaceae*.

COLLECTING LOCALITIES. 1962. *Malaya and Sarawak*, see BURTT's itinerary. *Terr. of New Guinea & Papua*: between Bulolo and Edie Creek (Oct. 3-13); Lolohe (= Laloki) Gorge (17); Cape Rodney to Doma Village in the Musa Mts, Centr. Owen Stanley Range (20-24); Doma Village area and surrounding mist-forest ridges (26-Nov. 25).—1968. Trip to New Guinea with Mr MICHAEL BLACK and C. E. RIDSDALE (see there), also collecting in *Java and Malay Peninsula*.

COLLECTIONS. *Herb. Edinb.*: mostly *Gesneriaceae* and *Orchidaceae*. A 300 numbers living material were collected. Dupl. herb. spec. will be distributed to *Lae, Leyden, etc.*

\***Woolliams, Keith Richard**

(1940, Chester, England; x), graduate in Horticulture, Roy. Bot. Gard. Kew (1963); currently Curator, Botanic Garden, Lae, Terr. of New Guinea.

COLLECTING LOCALITIES. 1963. *Sabah* (= North Borneo), live plants; Talibu, Southern Highlands, *New Guinea*, with J. S. WOMERSLEY.—1968. Mt Wilhelm in *New Guinea*, living collections.

COLLECTIONS. Mostly living plants, but dried material with WOMERSLEY in *Herb. Lae*; dupl. also in *Edinb.*

\***Worobai**, see Boswezen Nieuw Guinea.

**Wray, Leonard**

COLLECTIONS. Add: Also dupl. in *Herb. Edinb.* (ex Calc. and Kew).

\***Wright, K. G.**

collected in the NGF series at Sawette sawmill near Salamau, *Papua* (1959); *Herb. Lae*.

**Wyatt-Smith, John**

Add: He made an exploration of Mt Tahan in Feb. 1960, accompanied by B. A. MITCHELL, WONG YEW KWAN, and some others.

He retired early in April 1963 under the Malay-anisation Scheme and accepted an appointment under FAO sponsorship at Ibadan University in Nigeria. At present settled in England.

LITERATURE. (2) Add: 'A Survey of the peat swamp research plots in naturally regenerated forest' (Mal. Res. Pamphl. no 39, 1961, 55 pp., map); 'Ecological Studies on Malayan Forests' 1 (*Ibid.* no 52, Dec. 1966, 20 pp., 6 fig., 33 tab., 26 app. tab.).

**Wycherley, Paul Renoden**

Add: (1928, Bromley, Kent, England; x) was educated at the University College, London (1946-52), B.Sc. (Hons) Botany (1949), Ph.D. (1952); in 1951/52 guest student at Wageningen Agricultural College in the Netherlands. In 1953 Botanist, and from 1965-71 Head, Botany Division of the Rubber Research Institute of Malaya. Sometime President Malayan Nature Society and Chairman Terrestrial Conservation Section, International Biological Programme, West Malaysia. Intensive travel throughout Great Britain and West Malaysia; extensive travel in Thailand, East Malaysia, Australia, Japan, Canada, Central and South America, and Europe. An ardent advocate for and author on nature conservation in Malaysia, especially the Malay Peninsula. In 1972 Director of King's Park and Botanic Garden, Perth, W. Australia.

COLLECTING LOCALITIES. Mostly in plantations to study the weed flora<sup>1</sup>. A few collections from forest and limestone hills, especially Sungei Buloh and Batu Caves, Selangor respectively.

COLLECTIONS. Few specimens in *Herb. Rubb. Res. Inst. Malaya, Sing.* and *Kew*.

LITERATURE. (1) Author of 'Identification of plants on Malay Rubber Estates' (Plant. Bull. Rubber Res. Inst. Malaya 89, 1967, p. 55-65, 8 pl. (65-72)); 'Ground covers in plantation crops' (Symp. Ecol. Res. Humid Trop. Veget. Kuching 1963, 1965 p. 94-119, 6 fig., 11 tab.); 'Vegetation of Rubber Plantations' (J. Rubb. Res. Inst. Malaya 16, 1960, p. 87); 'The Spread of *Croton hirtus*' (Proc. Humid Trop. Symp. Tjiawi 1958, 1961, p. 279-280, 2 fig.); 'Ridley and Batu Caves' (Mal. Nat. J. 25, 1972, p. 22-37, pl. 6-10, incl. Check list flora); and numerous other papers.

\***Yacup**

collected in *Sarawak onwards of 1957*; *Herb. Kuching*; dupl. a.o. in *Herb. Edinb.*

\***Yamada, Kindi**

collected *Sonneratia* at Bandjermasin, *SE. Borneo* (Sept. 10, 1942).

\***Yasue, Yasunobu**

Entomologist, graduated in the Faculty of Agriculture, Kyoto University, 1941. Associate Professor of the Ohara Institute for Agricultural Biology, Okayama University, Kurashiki, Japan.

Member of the *Kyoto University West Irian Expedition*, Aug. 1963-Mar. 1964.

Lived at Surabaya before 1940. Collected a few plants, very fragmentary.

\***Yoshida**

is cited by OHWI (in MS), as collector of a *Digitaria* in *Celebes*; no date, nor locality.

**Ivan, Melchior**

LITERATURE. (2) Add: C. MONTAGNE: 'Note sur quelques plantes cryptogames recueillies en Chine pendant le séjour qu'y fit notre ambassade, et communiquées par M. le docteur Ivan' (Rev. Bot. Duchartre 2, 1846-47, p. 363-365).

**\*Zahir bin Yusoff, Mohammed**

Assistant of the Forest Research Institute at Kpong, collected 50 numbers in Pahang (G. Benom etc.), *Malaya*, in Apr. 1967.

**\*Zanten, Bernard Otto van**

(1927, Oudemolen, Dr., Netherlands; x), bryologist, educated at Groningen University (Ph.D. 1959). After having taken his doctor's degree he joined the *Dutch New Guinea Expedition to the Sterrengebergte*, and subsequently paid a 3-months visit to New Zealand. At present on the staff of the Botanical Laboratory of Groningen University, working on his moss collection. In 1969 he made a half-year bryological collecting trip to Australia, New Zealand, Guadalcanal, New Guinea, Luzon, and Japan, sponsored by WOTRO.

COLLECTING LOCALITIES. 1959 (Apr.-Sept.). Former *Dutch New Guinea*.<sup>1</sup> N. coast: Hollandia and Ifar; S. New Guinea; at Tanah Merah and Kaliwin on Digoel R.; Ajerok; on the Kau R. at Bian-Katem, Wombon, Koekoeboen, Anoendjamdit, Aremko, Oemkoebon, and Oejambiep; still farther to the north at Amiol and Katem, Songgan and Arimkop; Sibil Valley; Mt Antares (1300-3400 m).—1968. Bryological exploration (June-Dec.):<sup>2</sup> *E. New Guinea*: from Port Moresby exploring (June 8-13) Brown R. area, Musgrave R., Sogeri Plateau, Siritumu Lake; from Lae in Suru R. area (15-16); Wau (MacAdam Memorial Park, Mt Kaindi) (17-19); Goroka (Marafunga, Daulo pass) (21-23); Mt Wilhelm (June 25-July 10); Mt Hagen (Baiyer R., Jimmy R.) (July 11-13); Lae (Situm, 16). Accompanied by D. N. MACVEAN and W. A. WEBER (see those). Subsequently in Australia, New Zealand and the British Solomons, returning to *E. New Guinea*: Goroka (Daulo Pass) (Oct. 13-15), Gembogl (16), Mt Hagen (18-22), Mt Giluwe (23-27), Mt Wilhelm (Oct. 29-Nov. 4), and Owen Stanley Range (Efogi) (Nov. 10-12), with R. JOHNS. With Mrs VAN ZANTEN-TUNELDER in the *Philippines*: Luzon: Mt Makiling (Nov. 19), Baguio (Mt Cabuyo, Mt S. Thomas, Asin) (20-21), Bontoc (Mt Data, Mt Polis, Sagada) (22-24), Baguio (Mt Cabuyo, 25), and in *Japan* (Nov. 30-Dec. 13).

COLLECTIONS. About 670 *New Guinea nos*, 1959, of which the greater part was collected in Sibil Valley and on Mt Antaris. About ¾ of the material consists of *Musci*,<sup>1</sup> the remaining part of *Hepaticae*, *Fungi*, *Lichens*, and *Algae*. Only few phanerogams, collected at Tanah Merah, in Sibil, and the Antares. His collection includes some plants collected by Dr W. VERVOORT and Dr A. G. DE WILDE (see those), and in collaboration with C. KALKMAN. In *Herb. Leyden*; at present *Musci* and *Hepaticae* in Groningen for revision, after which the 1st set will go to Leyden too, while a dupl. set will remain in *Herb. Groningen*. The phanerogams are separately numbered.

In New Zealand in 1959 about 600 *nos* were collected of which some 200 phanerogams; in

*Herb. Leyden*: lichens and 1 set of phanerogams; another set in *Groningen*, and the 3rd set in his private herbarium. The mosses will remain at Groningen, but a dupl. set will be sent to Leyden after identification.

The 1969 collection consists almost exclusively of bryophytes, of which those from the Philippines and Japan are collected with his wife, Mrs H. H. VAN ZANTEN-TUNELDER. A few *Hymenophyllums* were brought home and some phanerogams from Guadalcanal (Solomon Is.).

LITERATURE. (1) B. O. VAN ZANTEN: 'Mosses of the Star Mountains Expedition, Central New Guinea' (Nova Guinea, Bot. no 16, 1964, p. 263-368, pl. 22-36; for localities and dates cf. p. 264-265).

(2) Cf. complete itinerary in Fl. Mal. Bull. no 24, 1969, p. 1788. B. O. VAN ZANTEN: 'Verslag van een verzameltocht naar Australisch Nieuw-Guinea, Australië, Nieuw-Zeeland, Guadalcanal, Luzon, en Japan, 5 juni-17 dec. 1968 (1970) 66 pp., mimeogr., folio.

\*Zeano, see Forest Dept North Borneo.

**Zeeuw, Carl de**

(1912, East Lansing, Mich., U.S.A.; x) received an arts education and forestry training in Michigan State College; subsequently to Syracuse for work in wood anatomy under Dr H. P. BROWN at the New York State College of Forestry (M.S.). During the war he served with the U.S. Army Air Force, being stationed in Australia in 1942 and thereafter in New Guinea in the Port Moresby area, then inland from Buna Gona at Dobodura in Papua, and finally in the Markham valley in the Mandated Territory of New Guinea.

Upon return from service he resumed work at Syracuse on the Ph.D. in the investigation of the reaction of wood anatomy and physical behaviour; at present Professor of Wood Products Engineering at Syracuse.

COLLECTIONS. Mainly woody plants, partly from the Northern Territory of Australia (15), the others (37) from *New Guinea* (1943-45). In *Herb. Brisbane* (dried coll. + wood samples), *Herb. Melbourne* (wood samples in the For. Prod. Lab. C.S.I.R.O.), and at N.Y. State College (wood samples). The herbarium material of the last lot is still in his hands and in due time will be deposited in the *Arn. Arbor*. Fern collections (about 15) and some other herbaceous plants in *Herb. Brisbane*.

**Zeijlstra, Hein Hidde**

(d. 1961, Haarlem, Netherlands).

**Zieck, J. F. U.**

Correct for J. F. H. ZIECK (see Suppl. Cycl. Fl. Mal. I, 5, 1958, p. ccxxxvi). In 1962 he left New Guinea. In 1968 working for the Forest Products Research Centre, Boroko, Port Moresby, Papua.

Author of several mimeographed internal reports on the forests of New Guinea.

**Zollinger, Heinrich**

COLLECTIONS. Add: Some of his ferns from *Java*, are also cited as SPORLEDER, *Java*. Evidently at least fern duplicates in *Herb. SPORLEDER* (see there).

BIOGRAPHICAL DATA. Add: Peterm. Geogr. Mitt. 3, 1857, p. 210; *ibid.* 4, 1858, p. 39.

# SELECT INDEX

As in the Cyclopaedia and the 1st Supplement, *a selection has been made of geographical names* (mostly islands, lakes, mountains, rivers). The larger islands, *e.g.* Sumatra, Java, Borneo, New Guinea, Luzon, will only exceptionally be found in the index as the result would have been a host of numerals behind them, difficult to handle and most of the references being hardly worthwhile; for a short survey of the larger Malesian units see p. (3). The Solomon Islands have been omitted as falling beyond the scope of Flora Malesiana.

*Names of ships, expeditions, and persons* are sometimes included.

The *abbreviations placed in italics* behind the names are the following:

*d* = district  
*i* = island(s)  
*l* = lake(s)  
*m* = mountain

*p* = place  
*pen.* = peninsula  
*r* = river  
*s* = ship

*Reference.* Reference is made to the parenthesized Arabian pagination, instead of to the Roman numerals. The letters *a* and *b* following the page numbers indicate the left and right column respectively of the page.

Aas *m* 102a  
Abi *r* 101b  
Abilala *m* 85a  
Adelbert Range 80b  
Adi *i* 13b, 52b, 57a, 67a  
Admiral Gardner *s* 88a  
Adzare Range 82b  
Agung *m* 29a  
Aifat *r* 67a, 91a  
Ajamaroe *l* 101b  
Alas *r* 103a  
Albert Edward *m* 36b, 80b, 82b  
Amboaki *r* 91a  
Amboina, see Ambon  
Ambon *i* 58b, 93a, 105a, 108a  
Ambua *m* 52b  
Amdutakin *m* 52b, 102a  
Amorwange *m* 82b  
Anadi *r* 39a  
Anak Takun *m* 75a, 83b  
Andrassy *m* 47b, 65b  
Anggi *l* 39a, 76b, 91a/b, 94b, 100b, 101b  
Antares *m* 52b, 111a  
Antop *m* 101a  
Api *m* 22b  
Api Benarat *m* 23a  
Apo *m* 10b, 40a, 54a, 70a, 79b, 80b, 88b, 105a  
Apo Batu Buli Range 72a  
Apo *y* 40a  
Apriri *r* 101b  
Archbold *l* 28b  
Archbold Expeditions 16b, 24b, 45b  
Arfak Mts 38b, 52b, 57a, 91a, 101a/b  
Aroa *r* 78a  
Asmat region 13b  
Astrolabe Range 53a, 78a, 87a  
Atjeh 30b, 68a/b, 107b  
Aunde *l* 82b, 91a  
Aur *i* 64a

Babuyanes *i* 78b, 82a  
Bahiri *r* 78a  
Baiaio *r* 9b  
Baiyer *r* 18a, 39a, 108b, 111a

Bako Nat. Park 11a/b, 21a, 26b, 30a, 38b, 48a, 49b, 53a, 67b, 70b, 78b, 89a, 92b  
Baku, see Bako  
Balabac *i* 71a, 104b  
Balambangan *i* 104b  
Bali *i* 14a, 29a, 56a, 57a, 58b, 68b, 93a, 97a, 108a, 109a  
Bali(e)m Valley 25b, 42b, 57b, 60b, 87a, 101a  
Baling *m* 92a  
Balleh *r* 73a  
Baluran *m* 45a  
Bami *r* 39a  
Banahao *m* 73b  
Bandahara *m* 107b  
Bangeta *m* 82b  
Banguey *i* 104b  
Baram *r* 10a, 22b, 37a, 53a  
Barigi *r* 45b  
Barija *r* 20b  
Barker, Miss R. 92a  
Basilan *i* 39b, 73b, 79b  
Batan *i* 12b, 26a, 39b, 42a, 78b  
Batanes *i* 26a, 78b, 82a  
Batanta *i* 13b  
Batjan *i* 105a  
Batu Brinchang *m* 59a  
Batu Lawi *m* 72a  
Batu Lopang *m* 107b  
Batu Tibang *m* 10a  
Batukau *m* 109a  
Batulante *m* 57a  
Batur *l* 68b  
Batur *m* 100a  
Bauk *m* 106b  
Baung *m* 29a  
Bawean *i* 45a  
B(e)lumut *m* 23b, 30a, 39b, 84b, 89a, 106b  
Bena *r* 92b  
Bencoolen *d* 30b  
Benom *m* 51a, 106a  
Bensbach *r* 80b  
Beremban *m* 70b  
Beribai *m* 101b  
Berumbun *m* 22b  
Berumput *m* 13a, 19a, 92b  
Besar *m* 84a

Biah *r* 9b  
Biak *i* 39a, 57b, 67a, 70b, 87b, 100b, 101a/b, 107a  
Biaru *r* 78a  
Bier *r* 101b  
Biliran *i* 26a  
Billiton *i* 45a  
Biota *m* 82b  
Bismarck Mts 23a, 50b, 96a/b  
Bisschop, G. 75a  
Blumut, see Belumut  
Bohayan *i* 47b  
Bohol *i* 56b  
Bongao *i* 71a  
Bonite *s* 38a  
Bosavi *m* 85a  
Brangkat *m* 89a  
Bremer, Capt. 81b  
Brinchang *m* 22b, 69a, 70b  
British Museum—Newcastle upon Tyne Exp. 50b, 78a, 84b, 104a  
Bromo *m* 68b, 73a  
Brong *m* 89a  
Brown *r* 26a, 39a, 41b, 70b, 78a, 80a, 87a, 98a, 101b, 111a  
Bubu *m* 22b, 48a, 88b, 106a  
Bujung Malacca *m* 9b  
Bulolo *r* 41b  
Bumbu *r* 70b  
Bunga *r* 41b  
Bunga Bua *m* 106a  
Bunguran *i* 46b  
Burep *r* 41b  
Burias *i* 56b  
Burke, L. R. 60b  
Bus(s)u *r* 12a, 70b, 82b, 98a  
Butibum *r* 41b  
Buzu, see Bus(s)u  
  
Cabuyo *m* 111a  
Cagayan Sulu *i* 56b  
Calamangan *i* 56b  
Calayan *i* 78b  
Cambridge Kinabalu Exp. 92a  
Cameron Highlands 9a, 10b, 15b, 22b, 30a, 39b, 41a, 48a, 53b, 69b, 70a/b, 76a, 78b, 90a, 91b, 106a/b



- Camiguin *i* 26a, 42a, 70a  
 Canlaon *m* 39b, 70a  
 Capul *i* 56b  
 Carstensen Mts 25b, 29b, 46a  
 Catanduanes *i* 70a  
 Cebu *i* 56b  
 Celebes *i* 50b, 59b, 65a, 84a, 91b, 105a  
 Ceram *i* 58b, 93a, 108a  
 Chabang Tiga *m* 84a  
 Challenger *s* 27a  
 Chimbu Valley 16a, 38b, 75a, 91a, 95a, 103b  
 Chin See Chung 84a  
 Chini *m* 23b  
 Christmas *i* 10b, 67a  
 Clay *r* 39a  
 Colijn, Dr A. H. 29b  
 Concord *m* 40a  
 Conflict group 38b  
 Coquille *s* 30b  
 Corregidor *i* 35a  
 Credner *i* 71a  
 Crocker Range 9b, 23b, 67b  
 Cromwell Mts 45b  
 Crownprince Range 82b  
 C.S.I.R.O.—Rijksherbarium  
 Exp. Kubor Range 78a, 101b  
 Cyclops Mts 56b, 82b, 90b
- Dafonsoero *m* 91a  
 Dammi *i* 64b  
 Danau . . . see 34a  
 Danfu *r* 25a  
 Data *m* 63b, 73b, 90b, 95a, 111a  
 Deagan *i* 56b  
 Dempo *m* 73a  
 D'Entrecasteaux *i* 38b  
 Destacado *i* 56b  
 Dickson *m* 42a  
 Dieng *m* 68b, 100a  
 Digoel *r* 100b, 111a  
 Djambi *d* 30b  
 Doma Peaks 36a, 38b, 52b, 78a  
 Doole *p* 59a  
 Dua *i* 31a  
 Duke of York *i* 67a  
 Dyaul *i* 71a
- Ekum *m* 108b  
 Elandora *m* 16b, 50b  
 Emira *i* 25a  
 Endeavour *s* 12b, 25a  
 Engelhart, M. 60b  
 Enggom *m* 82b  
 Erap *r* 39a  
 Erave *r* 78a
- Faita *r* 90b  
 Fakfak *r* 101b  
 Fara *r* 21a  
 Finisterre Mts 43a, 50b, 75a, 78a, 84b, 98a, 104a  
 Flores *i* 57b, 61b, 86b, 100b, 109a  
 Fly *r* 66b, 74a, 80b  
 Freybourg Pass 85a
- Gading *m* 19a, 22b, 89a, 92b  
 Gaharu *m* 19a
- Gajah *m* 72b  
 Galathea Exp. 70b  
 Garatun *m* 27a  
 Garnier, Marietta 36a  
 Gebeh *i* 77b  
 Gedeh-Pangrango *m* 14b, 30b, 43b, 49b, 56a, 57b, 58a, 70a, 71b, 75b, 102b  
 Geelvink Bay 87b  
 Geger Bintang *m* 30b  
 Geli Mutu *m* 61b  
 Genofa *m* 100b  
 Genting Highlands 106a  
 Gigantanga *i* 56b  
 Giluwe *m* 25a, 63a, 78a, 80b, 87a, 103b, 108a, 109b, 111a  
 Gogol *r* 39a, 66b, 101b  
 Goldie *r* 78a  
 Golo *i* 56b  
 Gombo(c)k *m* 49a  
 Goodenough *i* 11a  
 Guimaras *i* 82a  
 Guiting-guiting *m* 79b  
 Gwamongga *m* 91b
- Haga *r* 25b  
 Halmahera *i* 105a  
 Handeulom Sisi *i* 90a  
 Harcourt *s* 81b  
 Herbert *r* 66b  
 Hermit *i* 71a  
 Herzog Mts 50b, 85a, 104a  
 Hijau *m* 46b, 69a, 89a  
 Hinde, A. 92a  
 Hindenburg Range 52b, 102a  
 Hindenburg-Dap Range 36b  
 Homoraon *i* 56b  
 Hondje *m* 57b, 109a  
 Hose Mts 10a, 11a, 19a  
 Hunstein Range 45b  
 Hydrographers Range 20b, 78a
- Idjen *m* 61a, 68b  
 Iglit *m* 63b  
 Inas *m* 18b, 106b  
 Iran *r* 92b  
 Iraya *m* 12b, 42a, 78b  
 Isarog *m* 73b  
 Ischon *r* 91a  
 Islands in Milne Bay 38b  
 Itbayat *i* 78b
- Jabau *r* 91a  
 Jacobsen, G. 92a  
 Jahn, Mr 57b  
 Jalimo *r* 84b, 90b  
 Jang *m* 45a  
 Japen *i* 57a, 87b  
 Jasar *m* 22b, 70b  
 Java *i* 11a, 76b  
 Jelakoi *m* 18b  
 Jerai *m* 48a, 64a, 83b  
 Jim(m)i or Jimmy Valley 41a, 64a, 66b, 82a, 111a  
 Job *i* 87b  
 Jolo *i* 31a, 56b  
 Juliana *m* 98b
- Kabanov, Dr 57b  
 Kaindi *m* 16b, 41b, 51b, 91a, 103b, 108b, 111a
- Kaironk *r* 18a  
 Kajang *m* 11a  
 Kalimantan Selatan *d* 102b, 103a  
 Kana *m* 47a  
 Kangean Islands 45a  
 Kantz *m* 102a  
 Kanyi *m* 92b  
 Kar Kar *i* 66b, 80b  
 Karimondjawa *i* 45a  
 Kau *r* 111a  
 Kaugel *r* 16a  
 Kebar Valley 87b, 91a, 101b  
 Kedah Peak 64b  
 Kelabit Highlands 10a  
 Kelai *r* 57b  
 Kelobo *i* 52a  
 Kemaboe *r* 26a  
 Kemiri *m* 68b  
 Kemp Welch *r* 70b, 105a  
 Kerewa *m* 52b  
 Kerigomna *m* 39b  
 Kerinci or Kerintji *m* 30b, 34a  
 Ketambe *m* 103a, 107b  
 Keyan *m* 47a  
 Kidayap *m* 58b  
 Kidul *m* 56a  
 Kikori *r* 85a  
 Kinabalu *m* 9a/b, 10a, 15b, 22b, 26b, 37a, 47a/b, 49b, 53a/b, 56b, 65b, 67b, 71b, 74a, 84a, 89a, 91b, 92a/b, 104b, 105a  
 King, Capt. P. P. 81a  
 Kinkain *m* 78a, 102a  
 Kiriwina *i* 36b  
 Kode *i* 83b  
 Koëbré *m* 91b  
 Kofiau *i* 60b  
 Komodo *i* 67a, 83b  
 Korongl *r* 75a  
 Koronon *m* 79b  
 Kosim Kardin, M. 34a  
 Krabo *m* 57a  
 Krakatau *i* 45a  
 Kratke Mts 16b, 41b, 50b  
 Krotky *s* 74b  
 Kubor Range 78a, 101b  
 Kujabu *r* 91a  
 Kukukuku ranges 87a  
 Kum *m* 108b  
 Kumme *m* 82b  
 Kumusi *r* 20b  
 Kusemun *m* 91a  
 Kutai Reserve 10a, 30b, 93a  
 Kutubu *i* 78a, 87a  
 Kwapena, Nava 36a  
 Kyoto Univ. Biol. Exp. to SE. Asia 49a, 89a  
 Kyoto Univ. W. Irian Exp. 110b
- Labuan *i* 65b, 68a, 82b, 104b, 105a, 106a  
 Lagaip *r* 87a  
 Lagong *m* 53a  
 Lajang *r* 92b  
 Laka'an *m* 53b, 86b  
 Lakân, see Laka'an  
 Lakei *i* 89a  
 Lala *z* 21a  
 Laloki *r* 39a, 41b, 78a, 105a  
 Lambert, A. B. 81b

Lambir *m* 11b, 19a, 37a, 53a  
 Lampong Distr. 30b, 50a, 67a  
 Langkawi *i* 9b, 18b, 22a/b, 38a, 41a, 51a, 54b, 83b, 95b, 99a, 106b  
 Latimodjong Mts 31b  
 Laut *i* 46b  
 Lawas Distr. 92b, 104b  
 Lawes *m* 39a  
 Lawit *m* 23b  
 Lebir *m* 23b  
 Ledang *m* 83b, 106b  
 Legaspi *m* 58b  
 Lei *r* 52b  
 Lensemoi *m* 101a  
 Leron *r* 41b, 82b  
 Leuser *m* 103a, 107b  
 Leyte *i* 26a, 37a, 39b, 56b, 70a  
 Likang *m* 109a  
 Limbang Distr. 92b, 104b  
 limestone localities 18b, 22b, 23a, 29a, 36a/b, 48a, 49b, 54b, 57b, 59a, 67b, 78b, 80b, 83b, 84a, 102b, 103a, 110b  
 Lipuun *i* 26a  
 Lomblem (= Lomblen) *i* 61b, 86b  
 Lombok *i* 97a  
 Long *i* 66b  
 Lord Duncan *s* 88a  
 Lou *i* 89b  
 Low, Hugh 62a, 105a  
 Lowry, J. B. 92a  
 Lubi *m* 39b  
 Luf *i* 71a  
 Lumaku *m* 71b  
 Lumut Hills 37a  
 Luzon *i* 70a

Mackenzie, Colin 60b  
 Madoera *i* 61a  
 Maja *m* 23a  
 Makanoi *m* 91a  
 Makatarem *m* 78b  
 Makiling *m* 70a, 73b, 75a, 79b, 82a, 108b, 111a  
 Malabar *m* 75b  
 Malengelo *i* 36a  
 Mamad, Mr 57b  
 Mambare *r* 20b  
 Mandi Angin *m* 23b, 106b  
 Manurep *m* 100a  
 Manus *i* 36b, 71a  
 Mapia *i* 101b  
 Maquiling, see Makiling  
 Marei Parei Ridge 104b  
 Markham *r* 12a, 16b, 39a, 70b, 82b, 84b, 98a, 108b  
 Marklo *i* 36a  
 Masbate *i* 56b  
 Mat(t)ang *m* 30a, 49b, 53a, 67b, 84a, 91b, 92b  
 Matsubara, M. 44b  
 Matupi *m* 82b  
 Maxwells Hills 106b  
 Mayon *m* 70a, 73b  
 Medamit *r* 92b  
 Medang *m* 48a  
 Mendi *r* 16a  
 Mentawa *m* 22b

Meos Noem *i* 57a, 87b  
 Meratus *m* 33a  
 Mersing *m* 73a  
 Meru Betiri Reserve 45a  
 Merurong Plateau 17b  
 Mesenuk *m* 91a  
 Mesilau *r* 91b  
 Michael *m* 16b, 24b  
 Milyin Kolyin *m* 102a  
 Mindanao *i* 58b, 63a, 70a, 73b, 79b, 80b, 95a, 98b, 105a  
 Mindoro *i* 56b, 58b, 63b, 93b, 99a  
 Misool *i* 76a  
 Mitchell, B. A. 110a  
 Möller *s* 53a  
 Mongremotti *m* 91a  
 Monogrito *m* 101b  
 Morehead *r* 78a  
 Morotai *i* 57b  
 Motupore *i* 36b  
 Mullankassan *i* 68a  
 Mulu *m* 10a, 19a, 22b, 47a  
 Murik *i* 66b  
 Murray *i* 66b  
 Murray Pass 80b, 82b  
 Murud *m* 10a, 19a, 71b  
 Musa Mts 32a, 110a  
 Musgrave *r* 36b, 41b, 111a  
 Mussau *i* 23a, 71a, 109b  
 Mutis *m* 86b

Naersen, K. van 61a  
 Nago *i* 71a  
 Naho *i* 85a  
 Naho *r* 84b  
 Namance *i* 25a  
 Naranjo *i* 56b  
 Natuna *i* 33a, 46b  
 Ndeki *m* 57b, 109a  
 Ne *m* 52b  
 Negros *i* 39b, 56b, 70a, 73b  
 Nerimbau *m* 101a  
 Nettoti *m* 91a, 101a  
 New Britain *i* 25a, 26a, 35b, 36b, 39a, 43a, 50b, 55a, 61a, 66b, 70b, 71a, 74a/b, 80a, 82b, 85a, 95b, 104a  
 New Guinea Border Exp. 38a, 43a, 68b, 80a, 93a  
 New Hanover *i* 25a, 71a  
 New Ireland *i* 24b, 25a, 31b, 36b, 50b, 52a, 53b, 66b, 71a, 84a, 95b  
 Njaboeti *i* 101b  
 Njapa *m* 57b  
 Noona Dan Exp. 23a, 29b, 56a, 71a, 72b, 109b  
 Nuang *m* 106b  
 Nunukan *i* 74a/b  
 Nusa *i* 36b  
 Nusa Baru *i* 56a  
 Nusa Kambangan *i* 68b, 93a  
 Nusalik *i* 36b  
 Nuttall, Thomas 15b

Obi *i* 105a  
 Obree *m* 23a  
 Oereb *r* 87b, 101b  
 Oiamadawa'a *m* 11a

Okapa *r* 38b  
 Ollerenshaw, David 36a  
 Oriomo *r* 63a  
 Orion Mts 52b  
 Otto *m* 9a, 16b, 24b  
 Owen Stanley Range 21a, 23a, 32a, 53a, 78a, 87a, 110a

Padang *m* 106b  
 Padang Lawas 49a  
 Padar *i* 83b  
 Padas *r* 104b  
 Pajung *m* 57b, 109a  
 Palawan *i* 26a, 39b, 56b, 65a, 71a, 73b, 79b, 104b  
 Paloë *i* 61b  
 Panay *i* 79b  
 Pandjang *i* 101b  
 Pangkor *i* 106a  
 Pangrango, see Gedeh-Pangrango  
 Panti *m* 20a, 23b, 42a, 49a, 84a  
 Papahag *i* 71a  
 Papandajan *m* 58a, 75b  
 Pasu *m* 37a  
 Patep *r* 41b  
 Pekeglbaro *m* 101b  
 Pelagus *r* 92b  
 Pemanggil *i* 18b  
 Penang *i* 20a, 22b, 33a, 38a, 48a, 49a, 54b, 58a, 69b, 70a, 73a, 84a, 95b, 104b, 106a/b  
 Penck *m* 36a  
 Penibukan Ridge 71b  
 Penrisen *m* 49b  
 Peutjang *i* 22b, 35a, 57a, 90a, 93a, 102b, 103a, 109a  
 Philippine—Hawaii Exp. 56b  
 Piora *m* 20b, 43a  
 Poe *m* 13a, 19a  
 Polis *m* 73b, 90b, 111a  
 Pondok *m* 84a  
 Pondok II *m* 89a  
 Pongani *r* 78a  
 Prahau (= Tangkoeban Prahoe) *m* 56a  
 Preussische Expedition 79b  
 Prince Albert Range 78a  
 Prince Alexander Range 80b  
 Prinseneiland *i* 45a, 57a  
 Puan *m* 47a  
 Pueh Range 92b  
 Pulau *m* 18b, 20a, 49a, 83b  
 Pulau = island, see under second word  
 Pulog *m* 23b, 50a, 79b, 81a, 94b  
 Pulusari *m* 15a

Rabong *m* 89a, 106b  
 Raja *m* 32a  
 Rajang, see Rejang  
 Ramu *r* 25a, 36a, 39a, 77b, 80b, 84b, 109b  
 Rana Mesé *i* 57b, 109a  
 Ranaka *m* 109a  
 Ranoe Upas *i* 34a  
 Rapet *m* 84a  
 Rara *m* 90b

- Rattlesnake *s* 62b  
 Raveni *m* 90b  
 Rawang . . . see 34a  
 Rawlinson Range 20b, 45b, 82b  
 Raya *m* 73a, 83b  
 Reedtz Thott *m* 53b  
 Rejang *r* 49b, 74b  
 Reok *m* 109a  
 Rindja *i* 83b  
 Rio Ampalit *r* 61b  
 Romblon *i* 40a, 79b  
 Rossel *i* 43a  
 Roté (Roti) *i* 86b, 100b  
 Royal Society Expeditions 22b, 26a/b, 44b, 84a, 89a, 92b, 94b  
 Rijkssen, H. 103a  
 Rijksherbarium New Guinea Exp. 90b  
  
 Sabal Tapang *r* 92b  
 Sabtan(g) *i* 26a, 78b  
 Sakar *i* 47b  
 Salahutu *m* 58b  
 Salak *m* 30b, 43b, 90a  
 Salawaket, see Sarawaket  
 Salim *m* 47b  
 Samar *i* 40a, 63b, 70a, 79b  
 Samperolat *m* 57a  
 St. Cruz *i* 71a  
 St. Joseph *r* 85a  
 Santo T(h)omas *m* 73b, 90b, 111a  
 Santubong *m* 37a  
 Sapamoro *i* 71a  
 Sarawaket (Saruwaket) *m* 10b, 20b, 41b, 45b, 82b  
 Sarempaka *m* 33a, 102b, 103a  
 Saru-mot *m* 91b  
 Saruwaket, see Sarawaket  
 Satuma *i* 18b  
 Schrader Range 18a  
 Scratchley *m* 25a  
 Sebat Kechil *r* 92b  
 Sedili Kechil *r* 23b  
 Sega *r* 57b  
 Segaham Range 49b  
 Selabor *m* 10a  
 Selang *m* 92b  
 Selingan *i* 23b  
 Sembilan *i* 46b  
 Senang *i* 18b  
 Senjavin *s* 76b  
 Sensenemes *m* 91b  
 Sentani *i* 57b, 70b, 91a, 100b, 107a  
 Separation Point 65a  
 Sepik *r* 28b, 39a, 44a, 45b, 66b, 78a/b, 80b, 84b  
 Serangoon *r* 58a  
 Sewie *m* 36b  
 Sheridan, Dr J. 92a  
 Shungol *m* 42a  
 Siasi *i* 56b  
 Sibium Range 78a  
 Sibutu *i* 56b  
 Sibuyan *i* 40a, 79b  
 Sidocarsi Mts 87b, 101b  
 Sierra Madre Range 50a  
 Silon *m* 64b  
  
 Simbai *r* 23a  
 Simpson Massif 27a, 53a, 78a, 87a  
 Singapore *i* 20a, 47b, 58a, 104b  
 Sipingan *i* 34a  
 Siritumu *i* 111a  
 Situ Bagendit *i* 58a  
 Situ Gunung *i* 34a  
 Skeat Exp. 40a  
 Slim Hills 106a  
 Snake *r* 39a  
 Sohoton *m* 40a, 63b  
 Solor *i* 61b  
 Star Mts 43a, 52b, 69b, 80b, 98b, 101a, 107a  
 Stong *m* 18b, 106b  
 Strickland *r* 66b  
 Strong *m* 25a, 55a, 97a  
 Subis *m* 37a  
 Suckling *m* 27a, 36b, 60a, 78a, 95b, 100a  
 Sujarta, Mr 57a  
 Sulphur *s* 44b  
 Sulu *i* 31a, 64b, 105a  
 Sumba *i* 49a  
 Sumbawa *i* 33b, 49a, 57a/b, 58b, 76b, 109a  
 Supiori Island 67a  
 Suru *r* 111a  
 Swart Valley 13b  
  
 Taal Volcano 73b  
 Tabanan *m* 109a  
 Tabanio *r* 49a  
 Tabar *i* 52a  
 Tabauwan *i* 47b  
 Tabayoc *m* 79b  
 Tafa *m* 36b  
 Tahan *m* 30a, 69b, 93a, 105a, 106b, 110a  
 Takun *m* 32b, 67b  
 Talawe *m* 36a  
 Tale *r* 87a  
 Talomo *m* 80b  
 Tamrau Range 91a  
 Tanggamus *m* 50a  
 Tangis *m* 35b, 36a  
 Tangkuban Prahur *m* 30b, 56a  
 Tapah hills 106b  
 Tapis *m* 18b, 23b  
 Tapul *i* 56b  
 Tari Subdistr. Exp. 102a  
 Taskul *i* 25a  
 Tataan *i* 64b  
 Tau Range 73a, 89a  
 Tauri *r* 39a  
 Tawar *i* 34a  
 Tawau Hills 10a  
 Tawitawi *i* 51b, 64b, 71a  
 Tchak *r* 87a  
 Tebu *m* 88b  
 Tembrok *m* 91b  
 Tempurong *m* 9b, 72b  
 Tenajan *r* 93a  
 Tengger *m* 30b  
 Tenom *m* 67b  
 Teraja *m* 47a  
 Ternate *i* 11b, 105a  
 Thursday *i* 98b  
 Ticao *i* 56b  
  
 Timah *m* 44a, 49a, 53a, 58a, 67b, 70a, 93a, 98a  
 Timbun Mata *i* 23b  
 Timor *i* 10b, 14a, 28b, 34b, 44b, 53b, 56b, 59b, 65b, 84b, 86b, 91b, 92b, 105b  
 Tinjar *r* 37a  
 Tioman *i* 38a, 84a  
 Toba *i* 68b, 107b  
 Tobi *m* 91a  
 Tokiri Range 91a  
 Tor *r* 101b  
 Torricelli Mts 28b  
 Trist *i* 43a  
 Trobriand *i* 36b, 38b  
 Trusmadi *m* 65b, 71b  
 Tuan Sket *m* 89a  
  
 Udjong Kulon *pen.* 20a, 22b, 30b, 31a, 39b, 45a, 57b, 58b, 76b, 90a, 93a, 102b, 103a, 109a  
 Ulu Kali *m* 36b, 39b  
 Umi *r* 82b  
 Undup *r* 9b  
 Ungaran *m* 61a  
 Uranie *s* 38a  
 Ursula *i* 56b, 71a  
 USDA Sugar Cane Exp. 39a  
  
 Vanapa *r* 78a, 82b  
 Vega *s* 55a  
 Victoria *m* 21a, 79b  
 Vikerman, Commander 61a  
 Vulcan *i* 82b  
  
 Wadimana *m* 53a, 78a, 87a  
 Wahgi Valley 16a, 78a, 108b  
 Waigeo(u) *i* 60b, 82b, 105a  
 Walker *m* 67b  
 Wamena *r* 87a  
 Wamsuf Massif 91a  
 Warida *r* 39a  
 Warjori *r* 91b  
 Warrapuri *r* 82b  
 Warsamson *r* 102a  
 Watjetoni *m* 101a  
 Waumi *r* 91a  
 Wekari *r* 91a  
 Wharton Range 82b  
 Wilhelm *m* 10a, 12a, 15b, 16b, 32a, 34a, 46a, 50b, 63a, 66b, 75a, 80b, 82b, 84b, 91a, 94b, 95b, 99a, 103b, 104a, 105b, 108a, 110a, 111a  
 Wilhelmina *m* 87a  
 Wissel Lakes 39a, 87b, 101b  
 Wondiwai Mts 57a, 87b  
 Wong Yew Kwan 110a  
 Wongge *m* 109a  
 Worcester *s* 74a  
 Wosi *r* 39a  
  
 Yanieb, Andrew 36a  
 Yellow *r* 66b  
 Yodda *r* 21a  
 Yule *i* 78a  
  
 Zanten-Tuntelder, Mrs van 111a  
 Zendilerong *r* 26a



## HYPERICACEAE<sup>1</sup> (N. K. B. Robson, London)

Trees, shrubs or perennial or annual herbs. *Leaves* simple, opposite and decussate (Mal. spp.), entire (Mal. spp.), sessile to shortly petioled, often with  $\pm$  translucent and sometimes black or red glandular dots and/or lines. Stipules 0. *Inflorescences* terminal and sometimes axillary, very rarely axillary only, cymose to thyrsoid or rarely racemose, bracteate at least initially, 1- $\infty$ -flowered. *Flowers* bisexual, actinomorphic, homostylous or heterodistylous. *Sepals* 5 (Mal. spp.), free or  $\pm$  united, imbricate, entire or with margin variously divided and often glandular, lamina glandular like the leaves, usually with greater proportion of glands linear rather than punctiform, persistent (Mal. spp.). *Petals* 5 (Mal. spp.), free, imbricate (contorted), alternisepalous, entire or with margin variously divided and often glandular, lamina usually glandular like the leaves, sometimes with nectariferous basal appendage, glabrous (Mal. spp.), caducous or persistent. *Stamen fascicles* 5 (Mal. spp.), epipetalous, free or variously united, each with 1- $\infty$  stamens; filaments variously united or sometimes apparently free, the free part usually slender; anthers 2-thecal, dorsifixed, often with gland terminating connective. *Staminodial fascicles* 3 or 0 (Mal. spp.), when present alternating with stamen fascicles. *Ovary* 1, superior, 5-3-celled or 1-celled with 5-2 parietal placentas; styles 5-3 (2), free or  $\pm$  united,  $\pm$  slender; stigma punctiform to capitate; ovules  $\infty$ -2 on each placenta (Mal. spp.), anatropous, horizontal or ascending. Fruit capsular (Mal. spp.), dehiscent septicidally or loculicidally. Seeds  $\infty$ -1 on each placenta, sometimes winged or carinate; embryo cylindric, straight or curved, with cotyledons longer to shorter than hypocotyl; endosperm absent.

**Distribution.** There are 7 genera with c. 550 spp., cosmopolitan except for Arctic regions and most of Polynesia, but only *Hypericum* and *Triadenum* occur outside the tropics and immediately adjacent areas. Of the three tribes, the *Vismieae* (3 genera) occur in Africa (including Madagascar) and America, the *Cratoxyleae* (3 genera) in Madagascar, Indo-Malesia, E. Asia and NE. America, and the *Hypericeae* (*Hypericum*) throughout most of the range of the family except for most lowland tropical areas. In Malesia only two genera are present: *Cratoxylum* Bl. and *Hypericum* L.

**Ecology.** Apart from *Hypericum* and *Triadenum*, the genera are confined to lowlands or intermediate altitudes in the tropics and subtropics, in  $\pm$  mesophytic habitats. *Hypericum* tends to be a high altitude mesophytic genus in the tropics; but some species occasionally grow at low altitudes. In temperate regions it ranges widely in altitude and habitat, but never occurs under extremely arid conditions. Many species of *Hypericeae* are tolerant of a wide range of soil conditions, but others (especially some herbaceous species of *Hypericum*) are restricted to particular soil types.

**Pollination.** Flowers of *Hypericum* are nearly all open-pollinated, being visited only for pollen by e.g. Syrphid flies and *Bombus* spp. Specialized pollination with nectar secretion and sometimes dimorphic heterostyly has evolved twice in *Hypericum* and also occurs in *Cratoxylum* and *Eliaea* (see below, under Morphology).

**Dispersal.** Seeds of the *Hypericeae* and *Cratoxyleae* are small and sometimes have wing-like expansions of the testa which would tend to promote wind dispersal. Those without such an aid are normally dispersed by gravity; but the seeds of some species of wet habitats may be carried in mud on the feet of wading birds. Birds or other animals are instrumental in the dispersal of those few species of *Hypericum* (in four distinct parts of the genus) in which the

---

(1) As will appear in the treatment, *Hypericeae* do not deserve family rank and should be viewed as a subfamily of *Guttiferae*. It is merely for convenience that this name is maintained here.

normally capsular fruit has become  $\pm$  baccate, as well as those of the *Vismieae*, where the fruit is always baccate or drupaceous.

**Morphology.** The three tribes of the *Hypericaceae* can be distinguished by several floral characters, as follows:

**Vismieae:** Perianth 5-merous; petals adaxially pubescent; staminodial fascicles 5; stamen fascicles 5; ovary 5-merous; fruit baccate or drupaceous.

**Cratoxyleae:** Perianth 5-merous; petals glabrous; staminodial fascicles 3; stamen fascicles 3 (*i.e.* 2 + 2 + 1); ovary 3-merous; fruit capsular.

**Hypericeae:** Perianth 5-4-merous; petals glabrous; staminodial fascicles absent or very rarely 3; stamen fascicles 5-4 (free or variously grouped or united); ovary 5-2-merous; fruit capsular or rarely baccate.

The grouping of the stamens has attracted much attention. (For a discussion of this question see ROBSON, *Trans. Bot. Soc. Edinb.* 41, 1972, 365-383, and works cited therein). Evidence from morphology, vascular anatomy and ontogeny indicates that in this family as well as the *Guttiferae*, the androecium basically comprises two diplostemonous whorls of stamen fascicles. In the *Hypericaceae* the episepalous fascicles are sterile or absent, whereas the epipetalous ones are fertile and may be free (*Vismieae*, *Hypericum pro parte*), united 2 + 2 + 1 (*Cratoxyleae*, *Hypericum pro parte*) or all united (*Hypericum pro parte*). The individual filaments of each fascicle may be united for over  $\frac{2}{3}$  of their length or less; or they may arise independently from the receptacle, so that the androecium appears to be afascicular. The number of stamens in each fascicle varies from 80-100 to 1 in *Hypericum*, plants with an androecium in the latter state typifying the genus *Sarothra* L., which LINNAEUS placed in his group *Pentandria*. These, however, cannot be recognized as distinct from *Hypericum*.

Some species of *Cratoxylum*, and some specimens of the monospecific genus *Eliaea*, have an appendage at the base of the petal ('petal scale') which encloses nectariferous tissue (*cf.* HOCHREUTNER, *C. R. Soc. Phys. Hist. Nat. Genève* 35, 1918, 82-85), and some of these exhibit dimorphic heterostyly, indicating a trend towards specialized insect pollination. This pollination syndrome also occurs exceptionally in *Hypericum* (see ROBSON, *l.c.*). It is associated with stiff erect sepals, resulting in an effectively tubular corolla. In such flowers, HOCHREUTNER (*l.c.*) has shown that the sterile episepalous stamen fascicles ('hypogynous scales') may act like lodicules by swelling and thereby expanding the perianth whorls.

**Anatomy.** Research on the anatomy of the *Hypericaceae* has been summarized in METCALFE & CHALK (*Anat. Dicot.* 1, 1950, 165-169), while a more detailed discussion of floral and vegetative anatomy of the genera *Eliaea* and *Cratoxylum* will be found in P. BAAS (*Blumea* 18, 1970, 369-391). Some of the most important anatomical papers for systematic purposes concern the nature and distribution of the secretory system that is found throughout the *Hypericaceae* and *Guttiferae*. Owing to a photosensitive reaction induced by hypericin ('hypericism'), the biochemistry of this and related substances, as well as the clinical details, have been much studied (review in J. M. WATT & M. G. BREYER-BRANDERWIJK, *Med. & Poison Pl. Southern Africa*, ed. 2, 1962, 495). The most recent summaries of the biochemical studies on hypericin and its distribution in *Hypericum*, both morphologically and systematically, are by C. MATHIS & G. OURISSON (*Phytochemistry* 2, 1963, 157-171) and C. MATHIS (*Étude Chimiotaxonomique du genre Hypericum* L., Thèse Fac. Pharm. Univ. Strasbourg. 1963). The form and distribution of 'black' glands has proved to be of taxonomic importance in *Hypericum*, while in *Cratoxylum* the form of the glands in the petals is of sectional significance. Other recent papers concerning anatomical topics in the *Hypericaceae* are few, but that by E. K. SCHONFIELD (*Mem. N.Y. Bot. Gard.* 18, 1, 1968), on petiole anatomy in the *Guttiferae* and related families, may be mentioned.

**Taxonomy.** The tribes *Vismieae*, *Cratoxyleae* and *Hypericeae* are frequently treated as the subfamily *Hypericoideae* of the *Guttiferae*, from which they differ by no one constant character, and so the rank of subfamily may well be the most appropriate one. The combination of the following characters, however, make it immediately recognizable:

Flowers bisexual. Antesepalous stamen fascicles sterile or absent; epipetalous fascicles free or variously united; stamens with filaments slender, free or partly united, and anthers small, dehiscing longitudinally. Ovary with styles 2-5,  $\pm$  elongate, free or partly or rarely wholly united and placentae 2-5, axile to parietal, each with 1- $\sim$  ovules. Fruit capsular or baccate or



drupaceous. Seeds exarillate; embryo with cotyledons free, not incrassate, and hypocotyl  $\pm$  slender. Germination epigeal. Leaves usually with venation  $\pm$  reticulate; glandular canals often interrupted or replaced by globular lacunae ('punctate glands'), often coloured dark red or black by hypericin.

**Cytology.** The basic chromosome number for the *Hypericeae* (i.e. *Hypericum*) appears to be  $n = 12$ , from which there is a descending series along several separate evolutionary lines to  $n = 7$  or, possibly, 6 (N. K. B. ROBSON & W. P. ADAMS, *Brittonia* 20, 1968, 95–106). Tetraploids occur on all the base numbers; but the only higher degrees of 'ploidy' recorded (pentaploidy and hexaploidy in *H. perforatum* L. and its hybrids) are associated with a partially apomictic breeding system. Only four species in the other two tribes have known chromosome numbers; two unspecified species of *Vismia* (*Vismieae*) have  $n = 10$ , whereas in the *Cratoxyleae*, *Cratoxylum formosum* (JACK) DYER has  $n = 7$  and *Triadenum virginicum* (L.) RAFIN.  $n = 19$ . Structural hybridity occurs in two American species of *Hypericum*, *H. punctatum* LAMK and *H. mitchellianum* RYDB. (ROBSON & ADAMS, l.c.).

**Chemotaxonomy.** *Hypericaceae* were treated as *Guttiferae-Hypericoideae* in my 'Chemotaxonomie der Pflanzen' 4 (1966) 223, to which the reader is referred for references of work published before 1965.

Our chemical knowledge of *Hypericaceae* is based largely on *Hypericum*. A great variety of polyphenolic compounds seems to be characteristic of *Hypericum* and related genera. Among them catechins, leucoanthocyanins including leucodelphinidin, chlorogenic acids, flavonols and condensed tannins very often occur in large amounts. The quercetin glycosides rutin, quercitrin and hyperin are very common in *Hypericaceae*; hyperin (= quercetin-3-galactoside) was isolated in 1938 from *Hypericum perforatum* and named after this plant. Most characteristic, however, are anthraquinonoid and xanthonoid pigments. They are mainly located in schizogenous cavities which are present in roots, stems, leaves and flowers. Two photodynamically active emodin-type naphthodianthrone, hypericin and pseudohypericin, seem to occur in all members of the sections *Euhypericum sensu* R. KELLER, *Campylosporus* and *Campylopus* (monotypic; *H. cerastoides* (= *rhodopeum*) only), but not in other sections of the genus *Hypericum*. Hypericin occurs probably also in roots of *Psorospermum guineense* but seems to be lacking in species previously placed in *Ascyrum*. Celebixanthone was isolated from the bark of *Cratoxylum sumatranum* (= *celebicum*) and *Haronga* (= *Harungana*) *madagascariensis* contains anthraquinones, anthrones and xanthones. Chrysophanol, physcion, madagascin, madagascinanthron, harunganin, haronginanthron and euxanthone were isolated from its bark. Very recently 2,7'-biemodol, a new type of dimeric anthraquinones, was extracted from its leaves (D. G. BUCKLEY *et al.* *Austr. J. Chem.* 25, 1972, 843). Maculaxanthone, a complex xanthone derivative has been isolated from roots of *Hypericum maculatum* (P. ARENDS, *Tetrahedron Letters* 1969: 4893) and uliginosin-A and -B were extracted from whole plants of the Mexican *Hypericum uliginosum*; both compounds are isoprenylated and acylated phloroglucin-derived phenols with strong antibiotic activity (H. L. TAYLOR & R. M. BROOKER, *Lloydia* 32, 1969, 217). *Eliaea articulata* contains quercitrin, leucocyanidin and condensed tannins; anthraquinones are absent but the xanthone mangiferin is present in its leaves (H. JACQUEMIN *et al.* *Pl. Méd. Phytothérapie* 3, 1969, 196). Mangiferin occurs also in leaves of *Hypericum humifusum* (PII. LEBRETON & M.-P. BOUCHEZ, *Pl. Méd. Phytothérapie* 1, 1967, 188).

Species of *Hypericum* do also contain essential oils stored in schizogenous cavities. A special feature of these oils is the presence of appreciable amounts of aliphatic compounds like 2-methyloctane, nonane, undecane, octanal and decanal.

Free triterpenes seem to be common in roots and barks. Friedelin and betulinic acid were isolated from the bark of *Harungana madagascariensis* and recently betulinic acid was shown to be a constituent of rootbark of *Hypericum inodorum* MILL. (= *elatum* ART.) and *H. androsaemum* L. (K. R. HARGREAVES *et al.* *Phytochemistry* 7, 1968, 331). Saponins (i.e. glycosylated triterpenes) and alkaloids seem to occur rarely in *Hypericaceae*.

Chemically *Hypericaceae* are closely related to *Guttiferae*. The latter produce highly characteristic pigments in their resins, oleoresins or 'latices'. The pigments are complex polyisoprenylated and acylated compounds derived from phloroglucin (the so-called coumarin-type neoflavonoids), benzophenones and xanthones. Besides, they produce biflavonoids in wood and

leaves. This group of plant constituents was believed some years ago to be practically restricted to gymnosperms. Constituents like the uliginosins, cuxanthone, mangiferin, celebixanthone and maculaxanthone connect *Hypericaceae* chemically intimately with *Guttiferae*.

The same is valid for the preponderance of friedelan-type and lupan-type (lupeol, betulin, betulinic acid) compounds among triterpenes and for the patterns of simple phenolics.

From the phytochemical point of view there is absolutely no need to separate *Hypericaceae* from *Guttiferae* (= *Clusiaceae*), i.e. to postulate family rank for *Hypericoideae*.—R. HEGNAUER.

Embryology. Embryo sac development in *Hypericum* is of the *Polygonum* type. Endosperm development is at first free-nuclear, and a chalazal cyst is produced at the 8- or 16-nucleate stage. This is later absorbed in the rest of the endosperm, which then becomes cellular (cf. A. N. RAO, *Phytomorphology* 7, 1957, 36–45, for details and some earlier references). Aposporous embryos occur in over 90% of the seeds of *H. perforatum* L. (K. L. NOACK, Z. Indukt. Abstamm. Vererb. 76, 1939, 569–601). In *Triadenum* the embryo sac development resembles that of *Hypericum*, and apospory has been reported (O. MYERS, *Amer. J. Bot.* 51, 1964, 664).

#### KEY TO THE GENERA

1. Trees. Flowers red, pink or white. Leaves without red or black glands. Stamen fascicles alternating with hypogynous scales. Capsule loculicidally 3-valved. Seeds winged . . . . . **1. *Cratoxylum***
1. Herbs or shrubs. Flowers yellow, often tinged red. Leaves with translucent glands and sometimes with black or red glands. Hypogynous scales (in Mal.) absent. Capsule (in Mal.) septicidal. Seeds (in Mal.) not or scarcely winged. . . . . **2. *Hypericum***

#### 1. CRATOXYLUM

BLUME, *Verh. Bat. Gen.* 9 (1823) 174; *Bijdr.* (1825) 144; *Mus. Bot. Lugd. Bat.* 2 (1852) 15; CORNER, *Gard. Bull. S. S.* 10 (1939) 21; GOGELIN, *Blumea* 15 (1967) 453. — *Elodea* (non JUSS., nec MICHX, nec *Elodes* ADANS.) JACK, *Mal. Misc.* 2 (1822) 21. — *Hornschuchia* (non NEES) BLUME, *Cat. Gew. Btzig* (1823) 15; cf. STEEN. *Bull. Jard. Bot. Btzig III*, 17 (1948) 459. — *Hypericum* sect. *Tridesmos* CHOISY in DC. *Prod.* 1 (1824) 546. — *Tridesmis* (non LOUR.) SPACH, *Suit. Buff.* 5 (1836) 358; *Ann. Sc. Nat. II*, 5 (1836) 351; BL. *Mus. Bot. Lugd. Bat.* 2 (1852) 18. — *Ancistrolobus* SPACH, *Suit. Buff.* 5 (1836) 360; *Ann. Sc. Nat. II*, 5 (1836) 352. — **Fig. 1–10.**

Trees or shrubs, glabrous (in Mal.). Bark at base of stem exuding yellow resinous sap, hardening black. Branchlets compressed, 4(–6?)-lined, with interpetiolar scars linear, closed (continuous and straight or curved upward) or open (interrupted and curved downward) (fig. 1). *Leaves* opposite or rarely subopposite, entire, sessile or petioled, often with fine translucent ('pale') glandular dots, without black or red glands. *Inflorescences* terminal, racemiform, paniculate to axillary racemes or single flowers. *Flowers* (except staminodial fascicles and gynoecium) 5-merous, sometimes heterodistylous. *Sepals* quincuncial-imbricate, coriaceous, persistent, with longitudinal pale or black glandular lines or dots, sometimes elongating in fruit. *Petals* deep crimson to pink or white, sometimes tinged orange or green, with reddish or black glandular dots or lines (fig. 1e), sometimes with nectariferous scale-like, basal appendage (fig. 1e, 6f, 8e–f), caducous to subpersistent. *Stamen fascicles* united 2 + 2 + 1, single one epipetalous and double ones episepalous, glabrous, caducous, each with ∞ stamens; filaments crimson to white, slender, united for over half their length; anthers crimson to white, ± shortly oblong to rhombic, dorsifixed, sometimes with 1–2 brown resiniferous glands terminating the connective. *Staminodial fascicles* 3, alternating with the fascicles, varying in shape and size (fig. 6g, i, j, 8g, i). (Flowers with 4–5-merous inner whorls occasionally occur). *Ovary* incompletely 3-celled; styles 3, free, ± slender, stigmas small, ± capitate. *Ovules* ∞–4 on the basal half of each placenta, erect or ascending. *Fruit* a loculicidal, 3-valved, ± ligneous capsule, with slightly prominent longitudinal

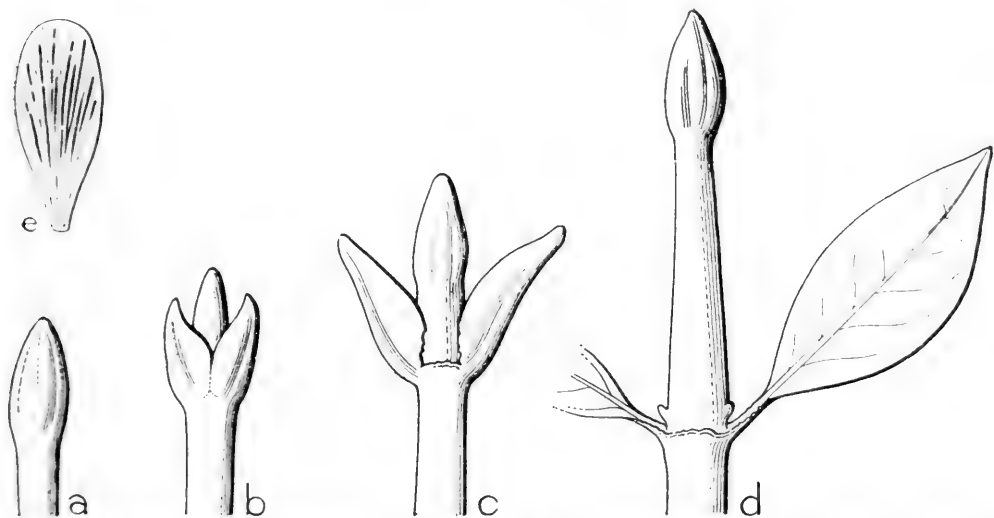


Fig. 1. a-d. Scheme of development of terminal bud in *Cratoxylum*, showing the origin of the inter petiolar scar; in this case the latter is 'continuous'. — *C. sumatranum* (JACK) BL. ssp. *sumatranum*. e. Petal from inside, appendage absent,  $\times 3$ .

vittae. *Seeds*  $\sim 4$  on each woody placenta (columella), cylindric to ovoid, imbricate; testa not sculptured; winged unilaterally or all round; embryo cylindric, straight, with cotyledons longer than the hypocotyl.

*Distr.* 6 species, occurring in continental Asia from India (east of  $92^{\circ}\text{E}$ ) east to S. China (south of c.  $24^{\circ}\text{N}$  and including Hong Kong and Hainan) and throughout *Malesia*, but not in the Moluccas and New Guinea. Fig. 2.

*Ecol.* In various habitats, from dense primary or secondary forests to grassland, and on various soils, occurring from sea-level to c. 1000 m or rarely to 1800 m.

*Morph.* The bodies described above as staminodial fascicles have been the subject of much investigation. Morphological and anatomical evidence indicates that they are sterile members of the episepalous androecial whorl (see ROBSON, Trans. Bot. Soc. Edinb. 41, 1972, 375, 381); but, whereas the five fertile members of the epipetalous whorl are still present (four of them united in pairs to form double fascicles opposite sepals), the three sterile members of the episepalous whorl are all single organs *i.e.* two members of this whorl do not develop.

Heterodistily occurs regularly in *sect. Tridesmos* and *C. cochinchinensis* and may be an occasional feature of other species. It is also present in the closely related genus *Eliaea*. This tendency towards specialized insect pollination is accompanied by the development of nectariferous petal appendages (absent in *sect. Cratoxylum*). In addition, the flowers of those species in which heterodistily is most pronounced tend to be pseudo-tubular, *i.e.* to have erect rigid sepals which prevent the petals from spreading. In these species (at least), the sterile fascicles probably act like the lodicules of grasses by swelling and thus aiding the expansion of the sepals and petals from the bud (see HOCHREUTNER, C. R. Soc. Phys. Hist. Nat. Genève 35, 1918, 85).

*Uses.* Species of *sect. Cratoxylum* and *Tridesmos* have hard, heavy wood. *C. sumatranum* is good for making charcoal and implements. *C. cochinchinense* has fairly durable wood, but is not used much for timber. Species of *sect. Tridesmos*, on the other hand, give a flexible durable timber, which is sometimes used by Indonesians for construction. The species of *sect. Isopterygium* have rather soft, red wood that splits badly and blunts tools on account of its high silica content. The Dayak of Indonesian Borneo, however, make drums of old hollow trunks of *C. arborescens*.

HEYNE (Nutt. Pl. 1927, 1080) stated that the bark at the base of the trunk of *C. formosum* produces a resinous exudate (at first golden yellow, then red, finally black) that is used as a remedy for scabies and leg wounds.

*Notes.* *Cratoxylum* is closely related to, but distinct from the Madagascan monotypic genus *Eliaea* CAMBESS., according to GOGELIN (1967) and BAAS (Blumea 18, 1970, 369-391). It is intermediate in distribution between that genus and *Triadenum* RAFIN., a herbaceous genus that has been wrongly included in *Hypericum* but appears to have been derived from *Cratoxylum*. *Triadenum* has an E. Asia-E. North American disjunct distribution (Assam, Taiwan, Japan, Korea, Siberia—eastern U.S.A. and Canada).

This account is based largely on the revision of the genus by GOGELIN (1967).

## KEY TO THE SPECIES

1. Leaves usually deciduous, with nerves  $\pm$  curved, distinct, uniting or not but not forming an intra-marginal vein. Seeds unilaterally winged. Inflorescence terminal and/or axillary. Petals with or without nectary scale, with punctate or linear glands.
2. Petals without nectary scale, with linear glands. Inflorescence terminal and sometimes axillary. Staminal fascicles (if well developed) recurved or cucullate. Leaves with nerves not arched or uniting. *Sect. Cratoxylum*.
3. Inflorescence paniculate, many-flowered, terminal and sometimes also axillary. Leaves very rarely glaucous beneath. Columella  $\frac{1}{4}$  to nearly  $\frac{1}{2}$  as long as capsule. . . . . 1. *C. sumatranum*
3. Inflorescence of 1-5-flowered cymes, terminal and axillary or axillary only. Leaves nearly always glaucous beneath. Columella basal. . . . . 2. *C. cochinchinense*
2. Petals with nectary scale, with punctate glands. Inflorescence axillary on old or the base of young shoots. Staminal fascicles (if well developed) never recurved. Leaves with nerves arched, uniting. *Sect. Tridesmos* (CHOISY) DYER.
4. Capsule 4-6 mm  $\phi$ . Seeds (7-)-12-17 per cell, obovoid-cylindric, 2-4 mm wide, with wing narrow at the base. Leaves  $3\frac{1}{4}$ -14 cm long, oblong to elliptic or more rarely obovate. . . . . 3. *C. formosum*
4. Capsule 2-4(-5 $\frac{1}{2}$ ) mm  $\phi$ . Seeds 4-6 per cell, cylindric to ovoid-cylindric,  $1\frac{1}{2}$ -2 mm wide, with wing not narrowing at the base. Leaves 2-9 mm long, elliptic to obovate. . . . . 4. *C. maingayi*
1. Leaves evergreen, with nerves straight, obscure, uniting to form an intramarginal vein. Seeds winged all round. Inflorescence terminal. Petals with minute nectary scale and punctate glands. *Sect. Isopterygium* ENGL.
5. Seeds 10-13 per cell. Leaves acute to acuminate, 2-4 times as long as broad, obovate-oblong to obovate-oblongate or elliptic, not or scarcely papillose beneath, not yellow or orange beneath. . . . . 5. *C. arborecens*
5. Seeds 4-7 per cell. Leaves rounded to obtuse-apiculate or rarely acute, usually 2 times as long as broad, elliptic, papillose-glaucous in the vein alveoli and usually yellow to orange beneath. . . . . 6. *C. glaucum*

1. *Cratoxylum sumatranum* (JACK) BLUME, Mus. Bot. Lugd. Bat. 2 (1852) 16; MIQ. Fl. Ind. Bat. 1, 2 (1859) 516; Suppl. (1861) 194; CORNER, Gard. Bull. S. S. 10 (1939) 35; GOGELIN, Blumea 15 (1967) 459. — *Elodea sumatrana* JACK, Mal. Misc. 2 (1822) 22. — *Hornschuchia hypericina* BL. Cat. Gew. Btzig (1823) 15. — *C. hornschiuchii* BL. Verh. Bat. Gen. 9 (1823) 174; KORTH. Verh. Nat. Gesch. Bot. (1842) 178; BL. Mus. Bot. Lugd. Bat. 2 (1852) 15; MIQ. Fl. Ind. Bat. 1, 2 (1859) 516; K. & V. Bijdr. 5 (1900) 134; GAGNEP. Not. Syst. 1 (1909) 20. — *C. clandestinum* BL. Mus. Bot. Lugd. Bat. 2 (1852) 15; MIQ. Fl. Ind. Bat. 1, 2 (1859) 516; K. & V. Bijdr. 5 (1900) 132; GAGNEP. Not.

Syst. 1 (1909) 20; BACK. Schoolf. Java (1911) 87; ENGL. in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 183. — *C. racemosum* BL. Mus. Bot. Lugd. Bat. 2 (1852) 16; MIQ. Fl. Ind. Bat. 1, 2 (1859) 516; K. & V. Bijdr. 5 (1900) 135; BACK. Schoolf. Java (1911) 87; ENGL. in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 183; BACK. & BAKH. f. Fl. Java 1 (1963) 383. — *C. celebicum* BL. Mus. Bot. Lugd. Bat. 2 (1852) 16; MIQ. Fl. Ind. Bat. 1, 2 (1859) 516; MERR. Philip. J. Sc. 4 (1909) Bot. 293; EN. Philip. 3 (1923) 76; MEIJER, Bot. Newsbull. Herb. For. Dept. Sandakan 7 (1967) 64. — *Ancistrolobus floribundus* TURCZ. Bull. Soc. Nat. Mosc. 31 (1858) 382. — *C. arboreum* ELMER, Leaf. Philip. Bot. 8 (1919) 3084. — *C. hypericinum* (BL.) MERR. En. Born. (1921) 392; BACK. & BAKH. f. Fl. Java 1 (1963) 383. — Fig. 3a-d.

Tree or shrub, to 35 m tall, deciduous to sub-deciduous, glabrous; bark fissured, peeling in strips, dark brown; young shoots with interpetiolar scar continuous. Leaves sessile or with petiole up to 15 mm, 4-18 by 2-7 cm, elliptic to ovate-oblong, apex rounded to cuspidate, base subcordate or rounded to attenuate, herbaceous to chartaceous, sometimes glaucous beneath. Inflorescence a foliate panicle, often large; pedicels  $1\frac{1}{2}$ -5 mm. Flowers homostylous. Sepals 3-6 $\frac{1}{2}$  by 3-4 $\frac{1}{2}$  mm. Petals dark or brownish red to brick red, pale green at base, 4-9 by  $1\frac{1}{2}$ -4 mm. Stamen fascicles  $2\frac{1}{2}$ -7 $\frac{1}{2}$  mm long, with stamens  $\pm$  congested, c. 120 per fascicle; anther gland absent. Staminal fascicles (if well developed) yellow, up to 3 mm long, flattened, oblong to obovate, cucullate. Ovary  $1\frac{1}{2}$ -3 mm long; styles  $1\frac{1}{2}$ -3 mm. Capsule 7-10 by 3-5 mm, c. 1-3 times as long as the sepals, cylindric, with columella basal to half as long as capsule. Seeds 3-10 per loculus, 5-7 $\frac{1}{2}$  by  $1\frac{1}{2}$ -2 mm, oblongate to oblong.

Distr. SE. Asia and Malesia: Sumatra, Java,

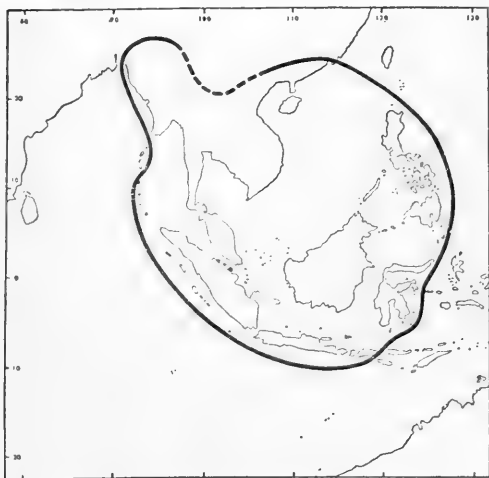


Fig. 2. Range of the genus *Cratoxylum*.

Lesser Sunda Is. (Bali to Sumbawa), Borneo, Celebes, and the Philippines. Fig. 4.

Note. *C. sumatranum* comprises 3 subspecies, one of which (*ssp. nerifolium* (KURZ) GOGELIN) occurs from Bengal to Thailand and Laos. It differs from the Flora Malesiana subspecies in having leaves always sessile to subsessile and sometimes glaucous beneath, always relatively few-flowered terminal and axillary panicles, petals bright red to brick red, and sepals in fruit 8–9 by 4–5 mm, almost as long as the capsule. In contrast, *ssp. sumatranum* and *blancoi* have leaves sessile or petiolate (to 15 mm), usually relatively many-flowered terminal (and sometimes axillary) panicles, petals dark red to brownish red, and sepals in fruit 3–7 by 2–4 mm, up to  $\frac{3}{4}$  as long as the capsule.

#### KEY TO THE SUBSPECIES

1. Leaves oblong to lanceolate,  $2\frac{1}{2}$ – $4\frac{1}{2}$  times as long as broad, apex acuminate to cuspidate.

*ssp. sumatranum*

1. Leaves elliptic to elliptic-oblong,  $1\frac{1}{2}$ – $2\frac{3}{4}$  times as long as broad, apex rounded or, more rarely, acute to shortly acuminate. . . . *ssp. blancoi*

*ssp. sumatranum*. — Fig. 3a–c.

Leaves oblong to ovate-lanceolate or lanceolate,  $2\frac{1}{2}$ – $4\frac{1}{2}$  times as long as broad, 5–18 by 2–5 cm, apex acute to cuspidate, base rounded to attenuate. Panicle variable in size. Capsule 7–12 by 3–5 mm, with sepals up to  $\frac{3}{4}$  as long. Seeds 3–10 per loculus.

Distr. *Malesia*: Sumatra, Java, Lesser Sunda Is. (Bali, Lombok, Sumbawa), Borneo, Celebes, Philippines (Luzon, Mindoro, Samar, Leyte, Panay, Siargao). Fig. 4.

Ecol. In primary or secondary forest, open woodland or grassland (Philippines) on well-drained soils of various types, 200–800–(1200) m. Fl. Nov.–May (Borneo), July–Dec. (Java); fr. March–Sept. (Borneo), Dec.–April (Java, Sumatra).

Vern. Sumatra: *garènggang* (P. Simalur), *garunggang*, *kemutun*; Java: *marong* (Salak), *rènjung gedé* (Sund.), *wuluan* (Central Java); Borneo: *garonggang*, *gèrungan*, *sèrungan* (N. Borneo), *laka-laka*, *sèrungan-mampat* (Brunei), *lingan*, *mampat* (W. Kutai); Celebes: *kaju arang*, *sio puté* (Malili); Philippines: many names, cf. MERRILL 1923: 76.

Note. This rather variable subspecies is represented in various islands by slightly different races which, although distinguishable locally, cannot be recognized or keyed out as taxonomic entities.

*ssp. blancoi* (BL.) GOGELIN, Blumea 15 (1967) 463. — *Hypericum olympicum* (non L.) BLANCO, Fl. Filip. (1837) 613. — *C. blancoi* BL. Mus. Bot. Lugd. Bat. 2 (1852) 17; GAGNEP. Not. Syst. 1 (1909) 21; MERR. En. Philip. 3 (1923) 75. — *Ancistrolobus micradenius* TURCZ. Bull. Soc. Nat. Mosc. 31 (1858) 382. — *C. blancoi* var. *apiculatum* MERR. Philip. J. Sc. 4 (1909) Bot. 294. — *C. punctulatum* ELMER ex MERR. En. Philip. 3 (1923) 76, nomen, in sched. — Fig. 3d.

Leaves ovate or rarely elliptic-oblong to obovate,  $1\frac{1}{4}$ – $2\frac{3}{4}$  times as long as broad, 4–14 by  $3\frac{1}{2}$ –7 cm, apex rounded to acute or shortly acuminate, base

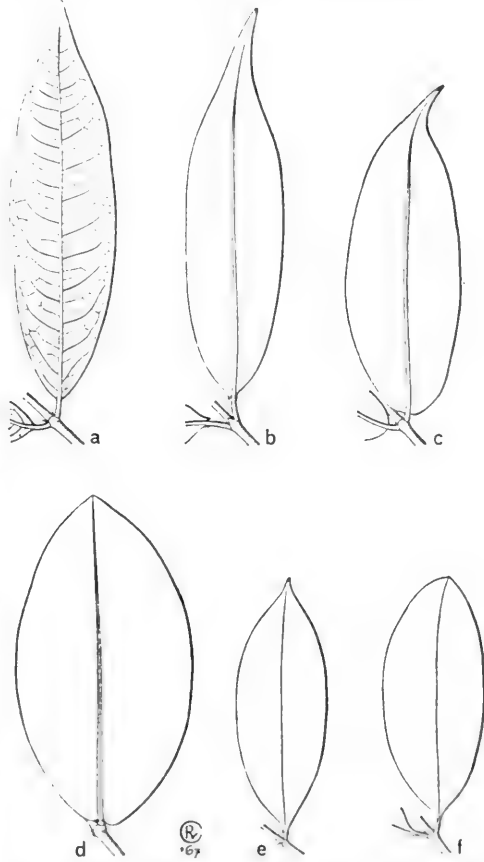


Fig. 3. Leaf shapes,  $\times \frac{1}{2}$ . a–c. *Cratoxylum sumatranum* (JACK) BL. *ssp. sumatranum*, d. *ssp. blancoi* (BL.) GOG., e–f. *C. cochinchinense* (LOUR.) BL.

broadly to narrowly cuneate. Panicles variable in size, often large. Capsule 8–12 by 3–4 mm, with sepals over half as long. Seeds 6–(7) per loculus.

Distr. *Malesia*: Philippines (Luzon, Catanduanes, Panay, Guimaras, Negros, Bohol, Leyte, Samar, Palawan, Mindanao, Basilan). Fig. 4.

Ecol. "In thickets and secondary forests at low altitudes" (MERRILL).

Vern. Philippines: many names, cf. MERRILL 1923: 76.

Note. *Ssp. blancoi* often intergrades with *ssp. sumatranum* where their respective distributions overlap.

2. *Cratoxylum cochinchinense* (LOUR.) BLUME, Mus. Bot. Lugd. Bat. 2 (1852) 17; MERR. En. Philip. 3 (1923) 77; BURK. Dict. (1935) 678; CORNER, Gard. Bull. S. S. 10 (1939) 34; SMYTHIES, Comm. Sarawak Trees (1965) 69; GOGELIN, Blumea 15 (1967) 463. — *Hypericum chinense* (non OSBECK nec L.) RETZ. Observ. 5 (1789) 27. — *Hypericum cochinchinense* LOUR. Fl. Coch. (1790) 472; CORNER, Gard. Bull.

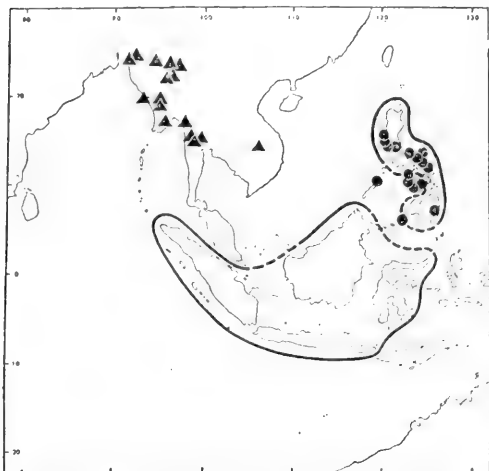


Fig. 4. Range of *Cratoxylum sumatranum* (JACK) BL.; delineated *ssp. sumatranum*, dotted *ssp. blanchoi* (BL.) GOG., triangles *ssp. nerifolium* (KURZ) GOG.

S. S. 10 (1939) 26. — *Hypericum petiolatum* (non L.) LOUR. Fl. Coch. (1790) 472. — *Hypericum biflorum* LAMK, Encycl. 4 (1797) 170; Hook. & ARN. Bot. Beechey Voy. (1833) 173. — *Vismia cochinchinense* (LOUR.) SPRENG. Syst. Veg. 3 (1826) 350. — *Hypericum carneum* WALL. Cat. (1828) no 4820, *nomen*. — *Hypericum pulchellum* WALL. Cat. (1828) no 4821, *nomen*. — *Hypericum horridum* WALL. Cat. (1828) no 4822, *nomen*. — *Elodea pulchella* LOUD. Hort. Brit. Suppl. 1 (1832) 587, *nomen*. — *Ancistrolobus ligustrinus* SPACH, Suit. Buff. 5 (1836) 361; Ann. Sc. Nat. II, 5 (1836) 352, t. 6. — *Ancistrolobus sp.*, WIGHT, Ill. 1 (1840) 111. — *C. polyanthum* KORTH. Verh. Nat. Gesch. Bot. (1842) 175, t. 36; BL. Mus. Bot. Lugd. Bat. 2 (1852) 16; KURZ, J. As. Soc. Beng. 43, ii (1874) 85, *incl. var. genuinum et var. carneum* KURZ; DYER, Fl. Br. Ind. 1 (1874) 257, *incl. var. ligustrinum* (SPACH) DYER *et var. wightii* DYER; KURZ, Fl. Burma 1 (1877) 84; PIERRE, For. Fl. Coch. 1 (1882) t. 50; FORB. & HEMS. J. Linn. Soc. Bot. 23 (1886) 72; KING, J. As. Soc. Beng. 59, ii (1890) 145; BOERL. Cat. Hort. Bog. (1901) 62, *incl. var. macrocarpum* BOERL.; GAGNEP. Not. Syst. 1 (1909) 19; Fl. Gén. I.-C. 1 (1910) 290; GAMBLE, Fl. Pres. Madras 1 (1915) 71; RIDL. Fl. Mal. Pen. 1 (1922) 152; CRAIB, Fl. Siam. En. 1 (1925) 112; ENGL. in E. & P. Nat. Pl. Fam. ed. 2, 21 (1925) 183; HUNDLEY & KO KO, List Trees etc. Burma ed. 3 (1961) 19; SMYTHIES, Comm. Sarawak Trees (1965) 68. — *Ancistrolobus carneum* VOIGT, Hort. Calc. Cat. (1845) 89, *nomen*. — *Elodea chinensis* (RETZ.) HANCE in Hook. Lond. J. Bot. (1848) 472. — *C. petiolatum* (LOUR.) BL. Mus. Bot. Lugd. Bat. 2 (1852) 17. — *C. ligustrinum* (SPACH) BL. l.c. 16; MERR. En. Philip. 3 (1923) 77; Trans. Am. Phil. Soc. 24 (1935) 268; BURK. Dict. (1935) 678; CORNER, Gard. Bull. S. S. 10 (1939) 29, 34. — *C. myrtifolium* BL. Mus. Bot. Lugd. Bat. 2 (1852) 17. — *C. wightii* BL. l.c. 18; CORNER, Gard. Bull. S. S. 10 (1939) 24. — *Elodea sp.*, GRIFF. Notul. 4

(1854) 569. — *Ancistrolobus brevipes* TURCZ. Bull. Soc. Nat. Mosc. 31 (1858) 383. — *C. lanceolatum* MIQ. Fl. Ind. Bat. Suppl. (1861) 500. — *Stalagmites erosipetala* MIQ. J. Bot. Néerl. 1 (1861) 126. — *C. biflorum* (LAMK) TURCZ. Bull. Soc. Nat. Mosc. 36 (1863) 580. — *C. chinense* (RETZ.) MERR. Philip. J. Sc. 4 (1909) Bot. 292. — *C. hypoleuca* ELMER, Leaf. Philip. Bot. 5 (1913) 1787. — Fig. 3e-f.

Tree or shrub, to c. 30 m tall, deciduous, glabrous; bark smooth, pale or scaly, grey-brown; young shoots with interpetiolar scar continuous or interrupted. *Leaves* with petiole 2–5 mm, 3–10½ by 1–4 cm, elliptic to ovate-lanceolate or lanceolate, apex obtuse to acutely acuminate, base broadly cuneate to attenuate, herbaceous to chartaceous, nearly always glaucous beneath. *Inflorescence* of 1–5-flowered axillary and usually terminal cymes; pedicels 1–2 mm. *Flowers* heterodistylous. *Sepals* 5–7 by 2–5 mm. *Petals* dark red to pink or orange, 5–10 by 2½–5 mm. *Stamen fascicles* 4–8 mm long, with stamens ± congested, c. 45–55 per fascicle; anther gland sometimes present. *Staminodial fascicles* (if developed) yellow, up to 3 mm long, flattened, oblong to obovate, cucullate. *Ovary* 2–3 mm long; styles 1–3 mm. *Capsule* 8–12 by 4–5 mm, c. 1–1½ times as long as sepals, ellipsoid-cylindric, with columella basal. *Seeds* (5–)6–8 per loculus, 6–8 by 2–3 mm, oblanceolate to elliptic or oblong.

Distr. Burma, China (south of 23°N), Hong-kong, Hainan, Indo-China, Thailand, in *Malesia*: Sumatra, Malaya, Borneo, Philippines (Palawan, Culion). Fig. 5.

Ecol. In primary or secondary forest, open woodland, grassland and river banks on usually well-drained soils of various types, 0–500 m (to 1200 m in China). *Fl. fr.* throughout the year.

Vern. Sumatra: *mulu* (Lampungs), *kaju lulus*, *lélulus* (Palembang), *mengidjang* (Banka); Malaya: *dërum sëlunchor*, *sëlunchus* (Perak), *kaju arang*, *këmundong*, *pëlawan* (Kelantan), *bëlawan padang*,

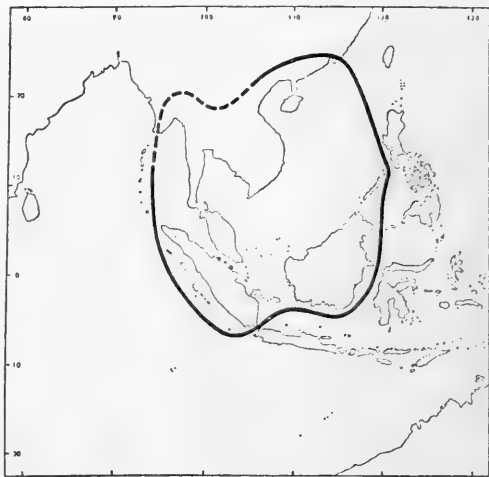


Fig. 5. Range of *Cratoxylum cochinchinense* (LOUR.) BL., coinciding with the range of *sect. Cratoxylum*.



*kélochus* (Pahang), *béluchus* (Negri Sembilan), *sérapat*; Borneo: *mampat*, *maradjalang*, *mulun* (W. Borneo), *baduk-baduk*, *géronggang*, *mogizon*, *pélawan-pélawan* (Brunei), *selangan-biabas*, *taik-akan* (Selangan Is.).

Note. The variation in *C. cochinchinense* ranges between the following extremes:

- (1) '*C. polyanthum* var. *wightii*' (DYER). Shrub or small tree; bark rough, grey-brown; interpetiolar scar usually interrupted. Leaves sometimes subopposite; lamina apex usually obtuse, base broadly to narrowly cuneate, seldom separating from midrib. Stamen fascicle stalks slender, over  $\frac{1}{2}$  of the total fascicle length (in flowers with staminode fascicles present).
- (2) '*C. polyanthum* var. *ligustrinum*' (DYER). Becoming large tree; bark smooth, pale; interpetiolar scar continuous. Leaves opposite; lamina apex acuminate, base attenuate, often slightly separating from midrib to produce minute appendages. Stamen fascicle stalks often compressed, short.

**3. *Cratoxylum formosum* (JACK) DYER**, Fl. Br. Ind. 1 (1874) 258; KURZ, Fl. Burma 1 (1877) 84; PIERRE, For. Fl. Coch. 1 (1882) t. 51; KING, J. As. Soc. Beng. 59, ii (1890) 147; K. & V. Bijdr. 5 (1900) 137; GAGNEP. Not. Syst. 1 (1909) 288; Fl. Gén. I.-C. 1 (1909) 288; BACK, Schoolfl. Java (1911) 88; RIDL, Fl. Mal. Pen. 1 (1922) 153, f. 16; CRAIB, Fl. Siam. En. 1 (1925) 111; ENGL. in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 184; HEND. Gard. Bull. S. S. 4 (1928) 222; CORNER, Gard. Bull. S. S. 10 (1939) 34; Wayside Trees Mal. (1940) 325, t. 69; BACK & BAKH. f. Fl. Java 1 (1963) 363; MEIJER, Bot. Newsbull. For. Dept. Sandakan 7 (1967) 64; GOGELIN, Blumea 15 (1967) 467. — *Elodea formosa* JACK, Mal. Misc. 2 (1822) 24. — *Hypericum biflorum* (non LAMK) CHOISY in DC. Prod. 1 (1824) 546. — *Tridesmis ochnoides* SPACH, Suit. Buff. 5 (1836) 359; Ann. Sc. Nat. II, 5 (1836) 351, t. 4A; BL. Mus. Bot. Lugd. Bat. 2 (1852) 18. — *Tridesmis jackii* SPACH, Ann. Sc. Nat. II, 5 (1836) 352; TURCZ. Bull. Soc. Nat. Mosc. 31 (1858) 384. — *Hypericum aegyptium* (non H. aegypticum L.) BLANCO, Fl. Filip. (1837) 615. — *Tridesmis formosa* (JACK) KORTH. Verh. Nat. Gesch. Bot. (1843) 197, t. 37. — *C. pentadelphum* TURCZ. Bull. Soc. Nat. Mosc. 36 (1863) 580; K. & V. Bijdr. 5 (1900) 139. — Fig. 6a-l.

Tree to 35 m tall, deciduous, glabrous, or partly pubescent; trunk spiny at base, bark grey, coarsely fissured, scaly; young shoots glabrous or pubescent, with interpetiolar scar interrupted. Leaves with petiole 5–15 mm,  $3\frac{1}{2}$ –14 by 1–7 cm, elliptic or sometimes obovate to oblong or lanceolate or ovate, apex acute or shortly acuminate to rounded, base broadly cuneate to rounded, herbaceous to chartaceous, sometimes glaucous beneath. Inflorescence of 1–6-flowered cymes in lower axils of current shoots or, if shoot fails to develop, apparently axillary on older stems; pedicels 3–10(–15) mm. Flowers heterodistylous. Sepals 4–7 by 2–4 mm. Petals white or pink to red or (very rarely) purplish, 7–17 by 3–7 mm; nectary scale 2–4 mm, rounded, entire or subentire. Stamen fascicles 5–14 mm, with stamens relatively lax, 20 per fascicle; anther gland present,

purple, or absent. Staminodial fascicles (if well developed) orange-red, trigonous, linguiform, attenuate to truncate, not cucullate. Ovary 2–4½ mm long; styles 2–8 mm. Capsule 10–16 by 4–6 mm, three times as long as sepals, ellipsoid, with columella  $\pm$  half as long as capsule. Seeds (7–)12–17 per loculus, 6–7½ by 2–4 mm, oblanceolate.

Distr. Hainan, South Vietnam, Cambodia, S. Thailand, S. Andaman Is., in *Malesia*: Sumatra, Malaya, Banka, Java, Borneo, Celebes (incl. P. Buton), Philippines (Luzon, Polillo, Mindoro, Sibuyan, Guimaras, Negros, Busuanga, Culion, Palawan, Mindanao). Fig. 7.

Ecol. In primary or old secondary forest, hill slopes, river margins or swamps, on sand or clay soils, 0–600(–1200) m. Fl. March–July (Borneo) or later (Sumatra, Banka) or earlier (Malaya).

Vern. Sumatra: *kébutul*, *kémutul* (Lampungs), *kémbutul*, *témbutun* (Palembang), *mampat* (Palembang, Riau), *ampét*, *mampét*, *témutun* (Banka); Malaya: *dérom* (Kedah, K. Lumpur), *bétina*, *géronggang*, *mumpat* (Perak), *kémuntong*, *mampat* (Kelantan), *mampat* (K. Lumpur), *drum* (P. Penang); Java: *rémbarang putun*; Borneo: *butun*, *kasat baku*, *mulun* (S. & E. Borneo), *pélawan* (Brunei), *biabas tahun*, *géronggang*, *kalammbunan*, *mengkutan*, *obah bukit*, *sérungan* (N. Borneo); Philippines: *mango-gong*, *marangguub*, *salingagon* (Palawan).

Note. *C. formosum* comprises two subspecies which scarcely overlap in distribution. Only *ssp. formosum* occurs in the Flora area. It differs from *ssp. pruniflorum* (KURZ) GOGELIN (S. China and Burma to S. Thailand) in being completely glabrous with leaves elliptic to oblong or rarely lanceolate (not oblong to lanceolate) and the anther connective eglandular (not glandular).

**4. *Cratoxylum maingayi* DYER**, Fl. Br. Ind. 1 (1874) 258; KING, J. As. Soc. Beng. 59, ii (1890) 147; Ann. R. Bot. Gard. Calc. 5 (1896) 138, t. 165; GAGNEP. Not. Syst. 1 (1909) 19; RIDL, Fl. Mal. Pen. 1 (1922) 154; BURK. Dict. (1935) 679; CORNER, Gard. Bull. S. S. 10 (1939) 35; Wayside Trees Mal. (1940) 327; GOGELIN, Blumea 15 (1967) 470. — *C. harmandii* PIERRE, For. Fl. Coch. 1 (1882) t. 53; GAGNEP. Not. Syst. 1 (1909) 18; Fl. Gén. I.-C. 1 (1909) 288. — *C. formosum* var. *thorelii* GAGNEP. Not. Syst. 1 (1909) 19; Fl. Gén. I.-C. 1 (1909) 289. — *C. cochinchinense* var. *calcareum* RIDL, Kew Bull. (1938) 115. — *C. acuminatum* MERR. Pap. Mich. Ac. Sc. 23 (1938) 185. — *C. subglaucum* MERR. l.c. 186. — *C. parviflorum* MERR. J. Arn. Arb. 19 (1938) 56. — *C. thorelii* PIERRE ex GAGNEP. Fl. Gén. I.-C. Suppl. 1 (1943) 252. — Fig. 6m-o.

Shrub or small tree, to 20 (rarely 35) m tall, deciduous or partly deciduous, glabrous; bark narrowly fissured with small scales, dark greyish-brown; young shoots with interpetiolar scar interrupted. Leaves with petiole 3–7 mm, 2–9 by 1–4½ cm, elliptic to oblong, apex shortly acuminate to rounded, base cuneate to subattenuate, chartaceous, not glaucous beneath. Inflorescence of 1–4-flowered cymes in lower (or sometimes also upper) axils of current shoots or, if shoot fails to develop, apparently axillary on older stems; pedicels 2–6(–8) mm. Flowers heterodistylous. Sepals 2½–5 by 1–3 mm. Petals white or pink,

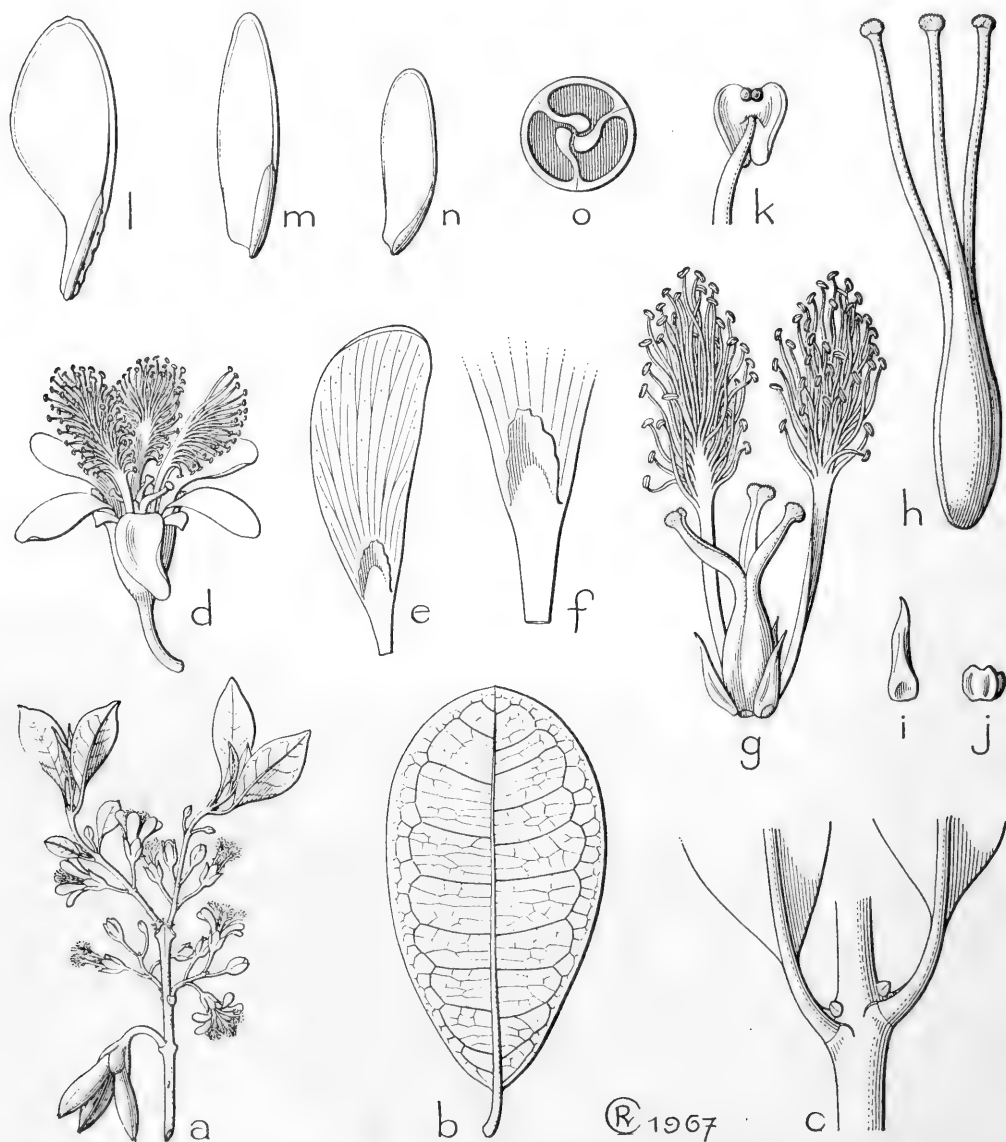


Fig. 6. Sect. *Tridesmos*. — *Cratoxylum formosum* (JACK) DYER ssp. *formosum*. a. Fertile twig apex,  $\times \frac{1}{2}$ , b. leaf,  $\times \frac{1}{2}$ , c. node, showing open interpetiolar scar, enlarged, d. short-styled flower,  $\times 2$ , e. petal, from inside,  $\times 4$ , f. base of same, showing appendage,  $\times 8$ , g. genitals and staminodial fascicles of short-styled flower,  $\times 6$ , h. pistil of long-styled flower,  $\times 6$ , i. staminodial fascicle,  $\times 6$ , j. staminodial fascicle,  $\times 6$ , k. anther, showing connective glands,  $\times 20$ . — *C. formosum* ssp. *pruniflorum* (KURZ) GOG. j. Staminodial fascicle,  $\times 6$ , k. anther, showing connective glands,  $\times 20$ . — *C. maingayi* DYER. m-n. Seeds,  $\times 4$ , o. cross-section of capsule, schematic (a, e-g, i HAVILAND 16, b-c, l BRASKAMP s.n., dd. 12-11-1927, d-h MAGNEN, GOURGAND, CHÂTILLON, dd. 20-10-1909, j-k HENRY 10687, m-n SF 36465, o RAHMAT SI BOEEA 7907).

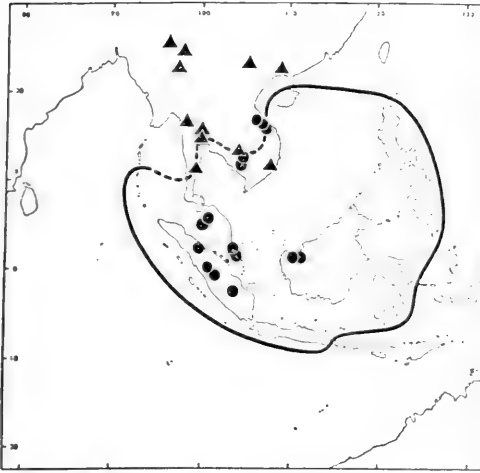


Fig. 7. Range of sect. *Tridesmos*; delineated *Cratoxylum formosum* (JACK) DYER ssp. *formosum*, triangles ditto ssp. *pruniflorum* (KURZ) GOG., dotted *C. maingayi* DYER.

6–12 by 2–5 mm; nectary scale 2–3 mm, truncate, undulate-denticulate. *Stamen fascicles* (5?)–7–9 mm, with stamens relatively lax, nearly always <20 per fascicle; anther gland present. *Staminodial fascicles* trigonous (?), linguiform, attenuate, not cucullate. *Ovary* 2–3 mm long; styles 1–5 mm. *Capsule* (6–)9–15 by 3–4(–5½) mm, c. 2½ times as long as sepals, fusiform, with columella  $\pm\frac{3}{4}$  as long as capsule. *Seeds* 5–6 per loculus, 6–6½ by 1½–2 mm, oblong to oblanceolate-oblong.

**Distr.** Burma, Cambodia, Central Vietnam, in **Malesia**: Sumatra (Payakumbu, Asahan, Riouw, Palembang), Malaya (Kedah, P. Penang, Johore, Singapore), Borneo (Sarawak, only near Kuching). **Fig. 7.**

**Ecol.** In lowland forest and on limestone hills, (60–)300–800 m. **Fl.** March–May (Malaya), Oct. (Sarawak).

**Vern.** Sumatra: *sĕmpat* (West), *pĕmatang* (Palembang), *kaju bonbon*, *kaju si haras* (Asahan); Malaya: *dĕrom bukit* (Kedah), *mampat* (Johore); Borneo: *gĕrunggang* (Sarawak).

**Note.** The discontinuous populations of *C. maingayi* tend to be morphologically distinguishable. They all differ from *C. formosum*, however, in the form and number of the seeds, the number of stamens per fascicle, the size of the leaves and the capsule shape.

**5. *Cratoxylum arborescens* (VAHL) BLUME, Mus. Bot. Lugd. Bat. 2 (1852) 17; KURZ, J. As. Soc. Beng. 43, ii (1874) 83; DYER, Fl. Br. Ind. 1 (1874) 258; KURZ, Fl. Burma 1 (1877) 85; KING, J. As. Soc. Beng. 59, ii (1890) 146, incl. var. *miquelii* KING; RIDL, Fl. Mal. Pen. 1 (1922) 153; ENGL. in E. & P. Nat. Pl. Fam. ed. 2, 21 (1925) 184; FOXW. Mal. For. Rec. 3 (1927) 138, tt.; HEND. Gard. Bull. S. S. 4 (1928) 223; BURK. Dict. (1935) 678; CORNER, Gard. Bull. S. S. 10 (1939) 22, 31, 34; Wayside Trees Mal. (1940) 325; HUNDLEY & KO KO, List Trees etc. Burma ed. 3 (1961) 19;**

**MEIJER, Bot. Newsbull. For. Dept. Sandakan 7 (1967) 64; GOGELIN, Blumea 15 (1967) 471. — *Hypericum arborescens* VAHL, Symb. 2 (1791) 86, t. 43. — *Vismia arborescens* (VAHL) CHOISY, Prod. Monogr. Hypér. (1821) 36; in DC. Prod. 1 (1824) 543. — *Hypericum coccineum* WALL. Cat. (1828) no 4823, nomen. — *Ancistrolobus glaucescens* TURCZ. Bull. Soc. Nat. Mosc. 31 (1858) 383. — *C. cuneatum* MIQ. Fl. Ind. Bat. 1, 2 (1859) 517; GAGNEP. Not. Syst. 1 (1909) 21. — **Fig. 8.****

**Tree**, up to 45 m tall, evergreen, glabrous; bark scaly, reddish; young shoots with interpetiolar scar continuous. **Leaves** with petiole 5–10 mm, 5–16 by 2–6 cm, obovate-oblong to obovate-oblongate or elliptic (2–4 times longer than broad), apex acute to cuspidate, base cuneate to attenuate, usually coriaceous, not or scarcely glaucous or papillose beneath. **Inflorescence** a many-flowered terminal pyramidal panicle; pedicels 1½–3 mm. **Flowers** homostylous. **Sepals** 3½–6 by 2–4½ mm. **Petals** deep red or very rarely orange or white, 4½–7 by 2½–5 mm; nectary scale up to 1 mm, often deeply laciniate. **Stamen fascicles** 4–5 mm, with stamens relatively congested, 30–40 per fascicle; anther gland absent? **Staminodial fascicles** (if well developed) greenish yellow, flattened, obovate, cucullate. **Ovary** 1½–2 mm long; styles 1½–3 mm. **Capsule** 7–9 by c. 4 mm, c. 1¼ times as long as sepals, cylindric, with columella half as long as capsule. **Seeds** 10–18 per loculus, c. 5 by 0.8 mm, narrowly oblong.

**Distr.** Burma (Tenasserim), in **Malesia**: Sumatra, Malaya (except the NE. part), Borneo. **Fig. 10.**

**Ecol.** Primary forest, dipterocarp forest, open forest, peat- and swamp-forest and fresh-water swamps on sand or sandy loam, 0–900 m or higher (to 1800 m on Mt Kinabalu).

**Vern.** Sumatra: *gĕronggang*, *gronggang*; *lĕdĕ* (Atjeh), *kalat* (Riouw), *ampĕt*, *idat* (Banka), *kaju dori* (Billiton), *kaju si pare-pare* (Asahan); Borneo: *gĕrongan*, *gĕrunggang*, *sĕrungan* (N. Borneo, Brunei).

**Note.** '*Var. miquelii*' is an extreme form with slender petioles and thin lanceolate-elliptic leaf-laminae, which is connected to the typical form by many intermediates.

**6. *Cratoxylum glaucum* KORTH. Verh. Nat. Gesch. Bot. (1842) 176; BL. Mus. Bot. Lugd. Bat. 2 (1852) 17; MIQ. Fl. Ind. Bat. 1, 2 (1859) 517; HALL. f. Ann. Jard. Bot. Btzg 14 (1897) 26; GAGNEP. Not. Syst. 1 (1909) 21; GOGELIN, Blumea 15 (1967) 473. — *C. microphyllum* MIQ. Fl. Ind. Bat. Suppl. 1 (1861) 500; RIDL, Fl. Mal. Pen. 1 (1922) 153; SMYTHIES, Comm. Sarawak Trees (1965) 69. — *C. polystachyum* TURCZ. Bull. Soc. Nat. Mosc. 36 (1863) 579. — *C. procerum* DIELS, Bot. Jahrb. (1926) 311. — *Cratoxylum A* CORNER, Gard. Bull. S. S. 10 (1939) 32. — **Fig. 9.****

**Tree**, up to 25 m tall, evergreen, glabrous; bark scaly (?); young shoots with interpetiolar scar continuous. **Leaves** with petiole 2–3 mm, 2–10 by 1–5 cm, elliptic (mostly less than twice as long as wide), apex acute or obtuse with often blackish mucro to rounded, base broadly to narrowly cuneate, coriaceous, densely greyish to orange-yellow papillose-glaucous beneath. **Inflorescence** a few- to many-flowered terminal, cylindric to

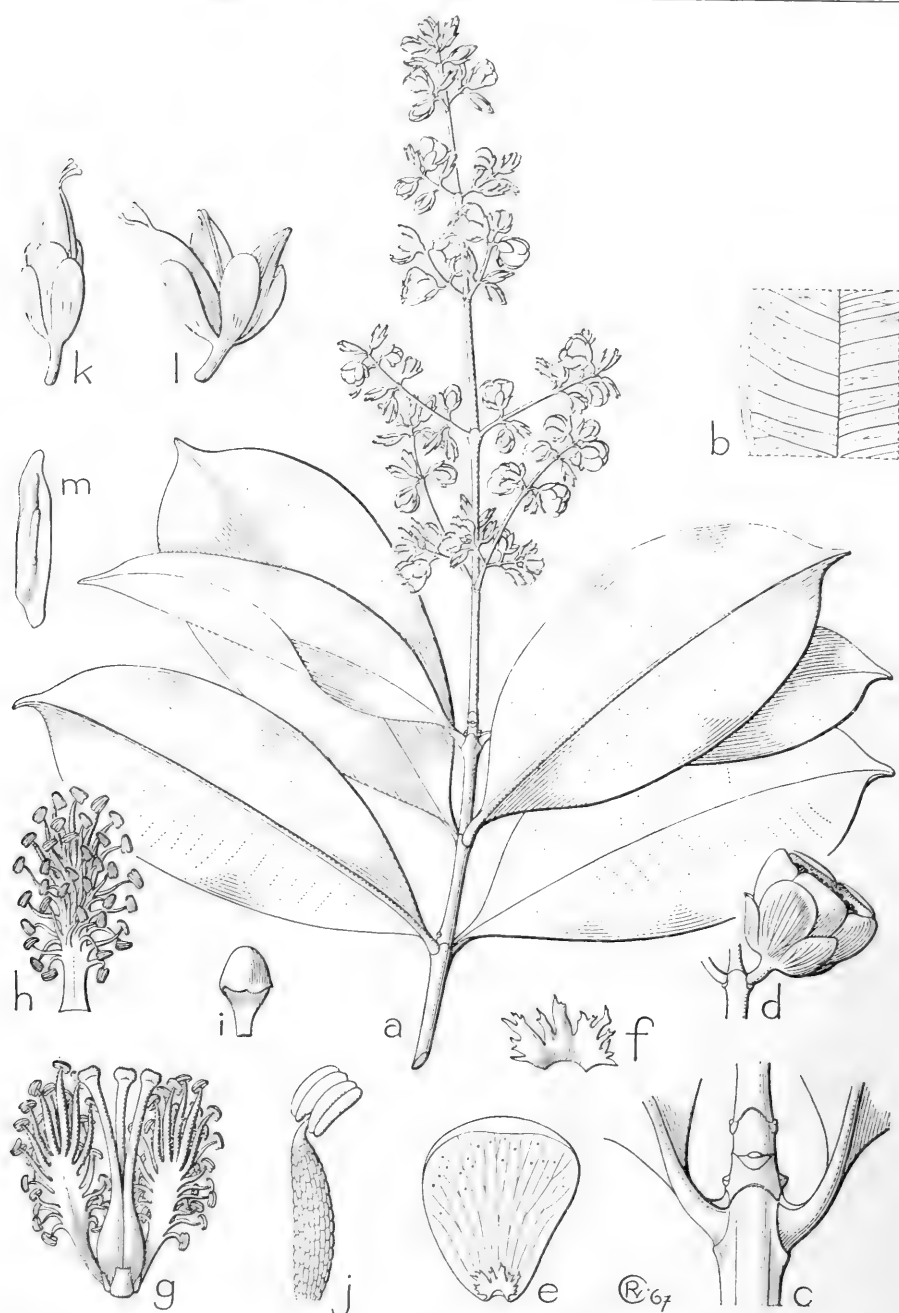


Fig. 8. *Cratoxylum arborescens* (VAHL) BL. a. Flowering twig,  $\times \frac{3}{4}$ , b. venation of leaf, c. upper node of a, enlarged, showing continuous petiolar scar, d. flower,  $\times 2$ , e. petal from inside, with appendage,  $\times 4$ , f. petal appendage,  $\times 8$ , g. genitals with small staminodial fascicles,  $\times 6$ , h. staminal phalange from outside, i. large, well-developed staminodial fascicle,  $\times 6$ , j. young anther, filament with swollen cells,  $\times 20$ , k. young fruit,  $\times 2$ , l. dehiscent capsule,  $\times 2$ , m. seed, winged all around, a vein running from margin with a loop through wing towards the centrally situated seed proper,  $\times 4$  (a-h, j SAN 23821, i HAMID 6383, k-m GRIFFITH 839).

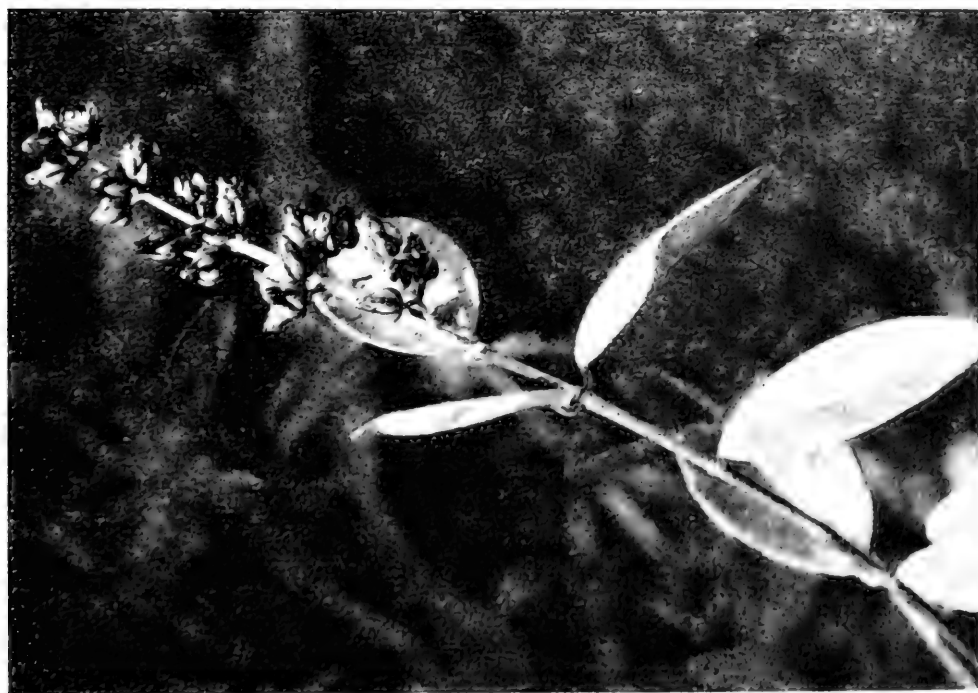


Fig. 9. *Cratoxylum glaucum* KORTH. (Photogr. Father A. ELSENER, Kalimantan, Sanggau, 1961).

pyramidal panicle; pedicels 1–3 mm. *Flowers* homostylous. *Sepals* 3–6 by  $2\frac{1}{2}$ –5 mm. *Petals* deep red to crimson, 6–8 by 4–5 mm; nectary scale up to 1 mm (usually shorter), shallowly denticulate. *Stamen fascicles* c. 5 mm, with stamens relatively congested, 30–40 in each fascicle; anther gland absent. *Staminodial fascicles* (if well developed)  $1\frac{1}{2}$  mm, flattened, oblong, cucullate. *Ovary*  $1\frac{1}{2}$ – $2\frac{1}{2}$  mm long; styles  $2\frac{1}{2}$ –3 mm. *Capsule*  $7\frac{1}{2}$ –10 by 3–4 mm,  $2\frac{1}{2}$ –3 times as long as sepals, cylindric, with columella  $\pm\frac{1}{2}$  as long as capsule. *Seeds* (4–) 6–8 per loculus,  $5\text{--}5\frac{1}{2}$  by 1 mm, narrowly oblong.

*Distr. Malesia*: Malaya (E. Johore: Mt Ophir, G. Arong near Mersing), E. Sumatran Is. (Lingga, Banka, Billiton, Karimata), Natuna Is. (Bunguran), Borneo (west: Sarawak, Brunei; central: Sanggau, Kenepai; south-east, also P. Lampei). Fig. 10.

*Ecol.* Mainly on podsolised sands and kèrangas (heath woodland, raised beaches, etc.), also in swampy or peaty areas (fresh-water swamps, peat swamp, peat forest), 0–100 m, rarely higher (600 m on Mt Maros, Banka, 1000 m and above on Mt Ophir in Johore).

*Vern.* E. Sumatran Is.: *édát, idat, idet* (Banka), *grunggang* (Billiton); Borneo: *édát, kaju longgang* (Pontianak), *gèronggang, gèrungan* (Samarinda, Sampit, Sarawak), *sèrongan* (Brunei).

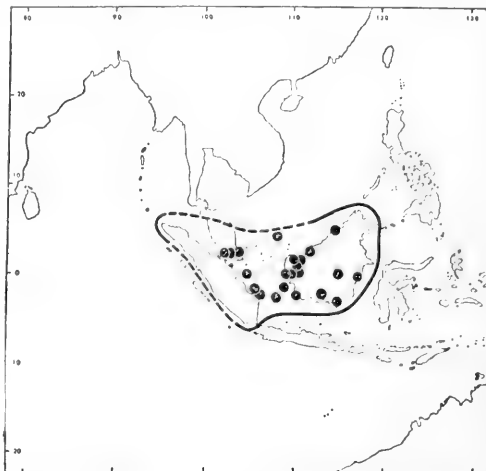


Fig. 10. Range of *sect. Isopterygium*; delineated *Cratoxylum arborescens* (VAHL) BL., dotted *C. glaucum* KORTH.

## 2. HYPERICUM

LINNE, Gen. Pl. ed. 5 (1754) 341; Sp. Pl. (1753) 783; R. KELLER in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 175, *pro parte excl. sect. IV Elodea*; Y. KIMURA in Nakai & Honda, Nova Fl. Jap. 10 (1951) 108; ROBSON, Blumea 20 (1972) 251–274.—*Ascyrum* L. Gen. Pl. ed. 5 (1754) 342; Sp. Pl. (1753) 787; ENGL. in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 174.—*Sarothra* L. Gen. Pl. ed. 5 (1754) 133; Sp. Pl. (1753) 272; Y. KIMURA in Nakai & Honda, Nova Fl. Jap. 10 (1951) 229.—*Brathys* MUTIS ex L. f. Suppl. Pl. (1781) 43; SPACH, Hist. Nat. Vég. Phan. 5 (1836) 446; Ann. Sc. Nat. II, Bot. 5 (1836) 356; MIQ. Fl. Ind. Bat. 1, 2 (1859) 513.—*Norysca* SPACH, Hist. Nat. Vég. Phan. 5 (1836) 426; Ann. Sc. Nat. II, Bot. 5 (1836) 363; Y. KIMURA in Nakai & Honda, Nova Fl. Jap. 10 (1951) 96.—*Takasagoya* Y. KIMURA, Bot. Mag. Tokyo 50 (1936) 498; in Nakai & Honda, Nova Fl. Jap. 10 (1951) 85.

Small trees, shrubs or perennial or annual herbs, glabrous (in Mal.). Bark not exuding resinous sap. Branchlets terete or 2–4-lined or -angled. *Leaves* opposite (rarely whorled), entire (rarely gland-fringed in extra-Mal. spp.), sessile or shortly petioled, with translucent ('pale') glands containing essential oils and sometimes black or red glands containing hypericin or pseudohypericin. *Inflorescences* terminal, cymose, dichasial or monochasial. *Flowers* (sometimes except the gynoeceum) 5(–4)-merous, homostylous (in Mal.). *Sepals* quincuncial or rarely decussate, coriaceous to chartaceous, persistent (in Mal.), glandular like the leaves. *Petals* yellow, often tinged red, glandular like the leaves, without nectariferous appendage (in Mal.), glabrous, caducous or persistent. *Stamen fascicles* epipetalous, free or variously united (2 + 1 + 1 + 1 or 2 + 2 + 1 or (5) or (4)) and then with double ones episepalous, glabrous, caducous or persistent, each with 1-c.60 stamens; filaments yellow, slender, usually united only towards the base or apparently free; anthers yellow or reddish, shortly oblong, dorsifixed or apparently



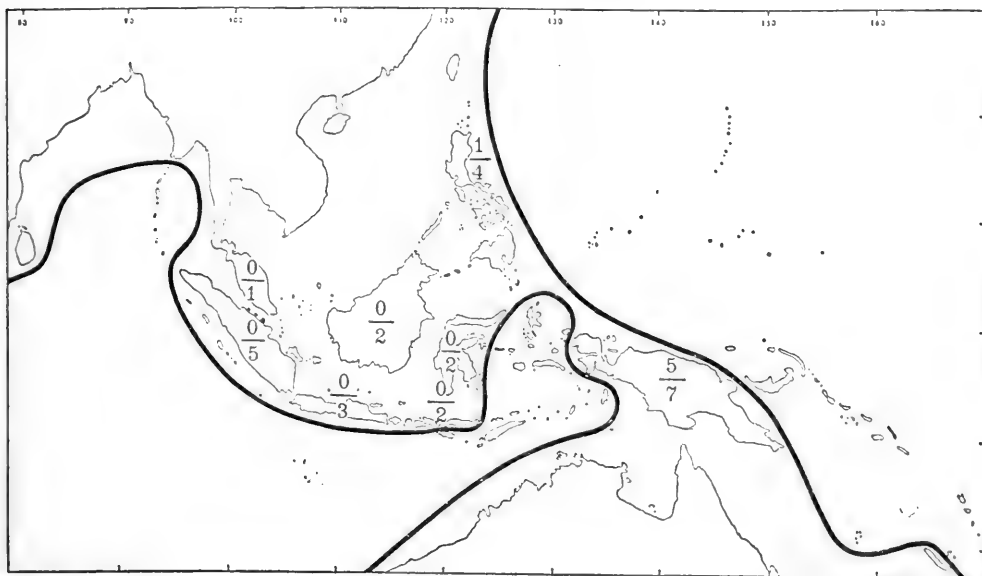


Fig. 11. Distribution of *Hypericum* in Malesia. Figures above the hyphen indicate the number of endemic species in each island or island group, that below the hyphen the total number of species.

basifixed (sect. *Takasagoya*), with amber or black gland terminating the connective. *Staminodial fascicles* absent (or very rarely 3, alternating with  $2 + 2 + 1$  stamen fascicles in extra-Mal. spp.). *Ovary* 5-3-celled or 1-celled with 5-3(-2) parietal placentas; styles 5-3(-2), free or  $\pm$  united,  $\pm$  slender; stigma small, flat or  $\pm$  capitate. *Ovules*  $\sim$ 2 on each placenta, horizontal. *Fruit* a septicidal 5-3(-2)-valved  $\pm$  coriaceous capsule (rarely tardily dehiscent or  $\pm$  baccate in extra-Mal. spp.), with  $\pm$  prominent vittae in the valves. *Seeds*  $\sim$ 1 on each placenta, curved-cylindric to ellipsoid, sometimes carinate with a membranous wing; testa variously sculptured; embryo cylindric, straight or curved, with cotyledons usually shorter than the hypocotyl.

**Distr.** About 400 spp. throughout most of the tropical and temperate zones, but absent from some lowland tropical areas (e.g. the Amazon basin) and rare in Australasia (2 native species, here spp. 14 and 15), in Malesia 13 spp. Fig. 11.

**Ecol.** In forest margins, grasslands, marshes or among rocks; rare in general in tropical lowland, but occurring in Malesia from sea-level in Sumatra to 3400 m in New Guinea.

**Notes.** *Hypericum*, as recognised here, is identical with ENGLER's *Hypericeae* except for *Hypericum* sect. *Elodea* (Juss.) CHOISY, which, as the genus *Triadenum* RAFIN., belongs in the *Cratoxyleae* and appears to be a herbaceous derivative of *Cratoxylum*.

The geographical relationships of the Malesian species are interesting. Sect. *Aseyreia* (Sumatra to SW. Celebes) also occurs in south continental Asia, Taiwan, Ceylon, Turkey, and Socotra. Sect. *Takasagoya* (Philippines) is otherwise confined to Taiwan. Sect. *Hypericum* (Philippines, Sabah, Sumatra) is pan-boreal in distribution; but the Philippine species is found elsewhere only in Taiwan and Japan, whereas the species of Sabah and Sumatra is otherwise eastern Himalayan in distribution. One of the two species of sect. *Brathys*, which also occurs from Japan to Ceylon and in Australia, New Zealand and Hawaii, is closely related to a species of southeastern U.S.A., whereas the other has a mainly southern distribution (Australia, New Zealand, New Caledonia, New Guinea) with outliers in South and East Asia (eastern Himalayas, Vietnam, Taiwan) and affinities with western South America. The affinities of the remaining section, sect. *Humifusoidium*, lie in quite a different direction, namely with Africa. The New Guinea species form a closely related group which appears to be derived from sect. *Campylosporus* of Africa, Madagascar and the Mascarene Islands. In addition, however, there are three species of sect. *Humifusoidium* in Africa and Madagascar (*H. natalense* WOOD & EVANS, *H. wilmsii* R. KELLER and *H. pepilidifolium* A. RICH.), which are apparently derivatives, in turn, of this New Guinea group. The relationships therefore are Africa  $\rightarrow$  New Guinea  $\rightarrow$  Africa. This New Guinea group also appears to

have given rise to two other species, *H. pulogense* MERR. (Philippines) and *H. beccarii* N. ROBSON (Java, Sumatra).

Hybrids of *Hypericum* species have been found from time to time in nature, but only between rather closely related species. Artificial hybrids are not always easy to produce, but some 'wide' crosses have been successful. The resultant plants, however, are usually weak and have always proved sterile. Some artificial crosses between closely related species, however, have thrived, and one or two are well-known garden plants. In general, apart from the hybrids involving *H. perforatum* L., which is largely pseudogamous and produces *n* and *2n* gametes, crosses are likely to be successful only between species with the same chromosome number.

#### KEY TO THE SPECIES

1. Petals and stamens caducous. Stamen fascicles, styles and ovary loculi 5. Broad-leaved shrubs, without black glands.
2. Styles free or partially united. Anthers dorsifixed. Inflorescence up to 3 nodes long. *Sect. Ascyreia* CHOISY.
3. Styles free. Leaves laxly or scarcely reticulate beneath.
4. Sepals acute to subacute. Petals (20-)25-45 mm long. Branches erect or arching, not frondose.
  1. *H. leschenaultii*
  2. *H. uralum*
4. Sepals rounded. Petals 9-18 mm long. Branches arching, sometimes frondose.
  3. *H. monogynum*
3. Styles united almost to the apex. Leaves densely reticulate beneath. . . . . 3. *H. monogynum*
2. Styles completely united. Anthers apparently basifixed. Inflorescence up to 14 nodes long. *Sect. Takasagoya* (Y. KIMURA) N. ROBSON . . . . . 4. *H. geminiflorum*
1. Petals and stamens persistent. Stamen fascicles 5-3 (*i.e.* 2 + 2 + 1) or stamens apparently afasciculate. Styles 3-5. Ovary loculi 1-4.  $\pm$  Ericoid shrubs or shrublets or herbs, often with black glands on various parts of the plant.
5. Capsule longitudinally vittate (scarcely so in *H. beccarii* ssp. *steenii*). Placentation axile to parietal. Black glands usually present. Petals pale yellow (flavus) to golden yellow (aureus). Shrubs or herbs.
6. Plant an erect or  $\pm$  straggling shrub or woody herb. Styles 3-5, equalling or shorter than the ovary. Placentation axile to parietal. *Sect. Humifusoideum* R. KELLER.
7. Flowers solitary, not in dichasial cymes nor with shoots in the axils of the uppermost leaf pair.
8. Leaves cuneate at the base, linear to elliptic or ovate-lanceolate, rarely broader, with laminar pale glands almost always linear towards the leaf base.
9. Leaves spreading or ascending, 8-12 mm long, flat. Styles 2½-3 mm long. . . . . 5. *H. sewense*
9. Leaves imbricate,  $\pm$  appressed, 2-9 mm long, flat or incurved. Styles 1½-2½ mm long.
10. Leaves flat, ovate-lanceolate to narrowly elliptic-oblong, with laminar glands mostly interrupted to punctate. Placentation axile. . . . . 6. *H. macgregorii*
10. Leaves incurved, narrowly elliptic or lanceolate-elliptic to linear with laminar glands mostly linear. Placentation parietal. . . . . 7. *H. saruwagedicum*
8. Leaves rounded to cordate at the base, narrowly ovate or ovate-triangular or elliptic to subcircular, with laminar pale glands linear towards the leaf base only or wholly punctate.
  9. *H. papuanum*
7. Flowers in regular or irregular dichasial cymes or, if solitary, then with shoots in the axils of the uppermost leaf pair.
11. Flowers always solitary with shoots in the axils of the uppermost leaf pair; leaves with laminar pale glands linear, often with parallel rows of dots. Styles 3 . . . . . 8. *H. bifurcatum*
11. Flowers in regular or irregularly dichasial cymes; leaves with laminar pale glands linear or punctate, without parallel rows of dots. Styles 3-5. . . . . 9. *H. papuanum*
6. Plant a perennial or annual herb or, if suffrutescent, then styles 1.4-1.7 times as long as the ovary. Styles 3 (4). Placentation axile.
12. Stem internodes 2-4(-6)-lined, at least when young. Stamen fascicles 3-5 or stamens not obviously in fascicles. Flowers solitary or with shoots in uppermost leaf axils. Suffrutescent or wiry herbs. *Sect. Humifusoideum* R. KELLER.
13. Plant a suffrutescent herb with erect or ascending stems. Leaves sessile. Flowers 2-3 cm  $\phi$ .
  10. *H. pulogense*
13. Plant a perennial herb with diffuse wiry branches. Leaves petioled. Flowers ¾-1 cm  $\phi$ .
  11. *H. beccarii*
12. Stem internodes terete. Stamen fascicles 3. Flowers in dichasial or monochasial cymes. Tufted or straggling perennial or annual herbs. *Sect. Hypericum*.
14. Sepal apex rounded. Petiole absent or up to 0.7 mm long. Perennial. 12. *H. pseudopetiolatum*
14. Sepal apex acute. Petiole 1-3 mm long. Annual . . . . . 13. *H. petiolulatum*
5. Capsule smooth, not vittate. Placentation parietal. Black glands absent. Petals usually apricot yellow (*armeniacus*) to orange (*aurantiacus*), sometimes red-tinged; small herbs with quadrangular stems. *Sect. Brathys* (MUTIS ex L. f.) CHOISY.
15. Petals *c.* 1.3 times as long as sepals. Sepals lanceolate to narrowly elliptic, acute or subacute. Stamens 30-50. Leaves mostly ovate-lanceolate to linear-lanceolate or narrowly oblong. Erect perennial or annual . . . . . 14. *H. gramineum*
15. Petals *c.* 0.85-1(-1.3) times as long as sepals. Sepals narrowly oblong to elliptic or obovate, acute to rounded. Stamens 5-30. Leaves very variable in shape. Erect to prostrate annual (always?)
  15. *H. japonicum*



Fig. 12. *Hypericum leschenaultii* CHOISY, West Java, Mt Pangrango, summit, 3000 m (Photogr. DOCTERS VAN LEEUWEN).

**1.** *Hypericum leschenaultii* CHOISY in DC. Prod. 1 (1824) 545; in Zoll. Syst. Verz. (1854) 151; Pl. Jav. (1858) 6; GUILLEMIN in Delessert, Ic. Sel. Pl. 3 (1837) 17, t. 27; BACK. Schoollfl. Java (1911) 87; KELLER in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 176; HOCHR. Candollea 2 (1925) 435, incl. var. *typicum* HOCHR., f. *elatior* HOCHR. et var. *coriaceum* (BL.) HOCHR.; STAPT, Bot. Mag. (1926) t. 9160; DOCT. v. LEEUWEN, Trop. Natuur 16 (1927) 115, f. 23, 24; MERR. Contr. Arn. Arb. 8 (1934) 107; STEEN. Bull. Jard. Bot. Btzg III, 13 (1934) 219; BACK. & BAKH. f. Fl. Java 1 (1963) 382; ROBSON, J. R. Hort. Soc. 95 (1970) 489; STEEN. Mt Fl. Java (1972) t. 23: 6. — *H. javanicum* BL. Bijdr. 1 (1825) 141; HASSK. Cat. Hort. Bog. (1844) 213; MOR.

Syst. Verz. (1846) 25; CHOISY in Zoll. Syst. Verz. (1854) 151. — *H. coriaceum* BL. Bijdr. 1 (1825) 142. — *H. triflorum* BL. l.c. 142, 143, incl. var. *angustatum* BL.; HASSK. Cat. Hort. Bog. (1844) 213; MOR. Syst. Verz. (1846) 25; (BURBRIDGE), The Garden 23 (1883) 158, t. 376; KELLER in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 176, f. 73. — *H. nervosum* CHOISY in Zoll. Syst. Verz. (1854) 152, non D. DON, 1825, nom. illegit. — *Norysca leschenaultii* (CHOISY) BL. Mus. Bot. Lugd. Bat. 2 (1856) 24; MIO. Fl. Ind. Bat. 1, 2 (1859) 515; Y. KIMURA in Nakai & Honda, Nova Fl. Jap. 10 (1951) 98. — *Norysca javanica* (BL.) BL. Mus. Bot. Lugd. Bat. 2 (1856) 24; MIO. Fl. Ind. Bat. 1, 2 (1859) 514. — *Norysca coriacea* (BL.) BL. Mus.

Bot. Lugd. Bat. 2 (1856) 24; MIQ. Fl. Ind. Bat. 1, 2 (1859) 515. — *H. nervosa* (CHOISY) MIQ. l.c. — *H. hookerianum* var. *leschenaultii* (CHOISY) DYER, Fl. Br. Ind. 1 (1874) 254, *quoad typum*; RIDL. J. Fed. Mal. Stat. Mus. 8, 4 (1917) 17. — *H. patulum* (ssp.)  $\delta$  *leschenaultii* (CHOISY) O.K. et (ssp.)  $\beta$  *variabile* O.K. Rev. Gen. Pl. 1 (1891) 60. — *H. hookerianum* (non W. & A.) BUYSMAN, Flora 107 (1914) 358. — *Norysca hookeriana* var. *leschenaultii* (CHOISY) Y. KIMURA in Hara, Fl. E. Himal. (1966) 210, *quoad typum*. — Fig. 12.

Shrub or treelet,  $\frac{1}{2}$ –2 $\frac{1}{2}$  m, branchlets 4-lined and flattened when young, becoming terete. *Leaves* subsessile or up to 7 mm petiolate, 2 $\frac{1}{2}$ –8 by 1–3 $\frac{1}{4}$  cm, lanceolate to narrowly ovate or rarely ovate, apex acute to rounded-apiculate, base broadly cuneate to rounded, margin often reflexed, glaucous beneath; 4 main lateral veins, with lax reticulate venation; glands all pale, shortly striate and punctate. *Inflorescence* 1–3(–10), rarely up to 18)-flowered, terminal (1–2 nodes), corymbose. *Flowers* (3 $\frac{1}{2}$ –)4–7 cm  $\phi$ , flat or slightly concave; buds  $\pm$  broadly ovoid, acute or subacute. *Sepals* 7–20 by 2–8 mm, free, imbricate, narrowly oblong or narrowly elliptic or rarely ovate to oblanceolate, very acute to subacute, entire, midrib sometimes visible below and sometimes incrassate above; spreading or recurved in flower and fruit; glands all pale, linear. *Petals* deep golden yellow, (2–)2 $\frac{1}{2}$ –4 $\frac{1}{2}$  by 1 $\frac{1}{4}$ –3 cm, broadly obovate to obovate-circular, entire, deciduous; apiculus  $\pm$  distinct, acute to obtuse; glands all pale, linear. *Stamen fascicles* 5, 9–12 mm long, c.  $\frac{1}{2}$  as long as petals, each with c. 80 stamens, caducous; anthers yellow, gland amber. *Ovary* 6–9 mm, ovoid or  $\pm$  narrowly ovoid-conic to narrowly ellipsoid, acuminate; styles 5, 3 $\frac{1}{4}$ –7 mm, about half as long as ovary, erect or suberect, outcurved near apex, free; stigma small; placentas 5, axile, with central lacuna. *Capsule* 1–2 cm, narrowly ellipsoid or narrowly ovoid-conic. *Seeds* dark orange-brown to reddish-brown, 0.8–1 mm, cylindric, sometimes curved, scarcely carinate, shallowly and minutely linear-foveolate to reticulate.

Distr. *Malesia*: Sumatra, Java, Lesser Sunda Is. (Bali, Lombok, Flores), SW. Celebes (Mts Bonthain & Latimodjong). Fig. 13.

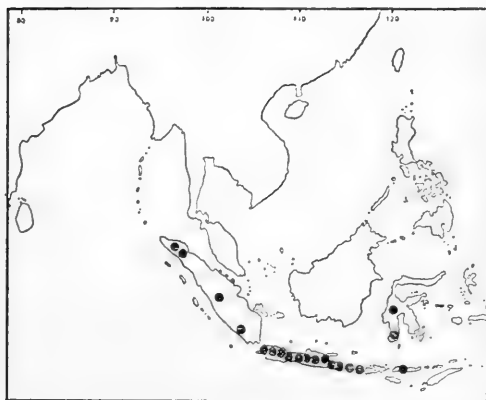


Fig. 13. Range of *Hypericum leschenaultii* CHOISY.

Ecol. Grassy slopes, thickets, open woodland, 1500–3300 m.

Note. The form on Mt Kerintji (Sumatra) has more prominent main lateral leaf veins, larger flowers and broader sepals than the remainder of the species. In this it comes closest to the nearest relative of *H. leschenaultii*, a hitherto undescribed species from Thailand that differs in having elliptic-oblong leaves, with an intramarginal vein, more prominent secondary lateral veins and an apiculate apex, and ovate-triangular sepals.

2. *Hypericum uralum* BUCH.-HAM. ex D. DON, Bot. Mag. (1823) t. 2375. — *H. patulum* (non THUNB.) WALL. Cat. (1831) no 4809; DYER, Fl. Br. Ind. 1 (1874) 254; STEEN. Bull. Jard. Bot. Btzg III, 13 (1934) 219; GAGNEP. Fl. Gén. I.-C. Suppl. 1 (1943) 248; HUNDLEY & KO KO, List trees etc. Burma ed. 3 (1961) 19. — *Norysca urala* (BUCH.-HAM. ex D. DON) K. KOCH, Hort. Dendrol. (1853) 66, no 3; Y. KIMURA in Nakai & Honda, Nova Fl. Jap. 10 (1951) 102. — *H. patulum* var. *uralum* (BUCH.-HAM. ex D. DON) KOEHNE, Deut. Dendrol. (1893) 415. — *H. garrettii* var. *ovatum* CRAIB, Fl. Siam. En. 1 (1925) 111.

Bushy shrub, 1.2–1.8 m (in Sumatra), with arching, sometimes frondose branches; branchlets 4-lined or 4-angled when young, eventually becoming 2-lined or terete. *Leaves* subsessile or up to  $\frac{1}{2}$  mm petiolate, 1–4 $\frac{1}{2}$  by  $\frac{1}{2}$ –2 $\frac{1}{2}$  cm, lanceolate to ovate, apex acute to rounded-apiculate, base narrowly or rarely broadly cuneate, very glaucous below; 3 main lateral veins, with scarcely visible lax reticulate venation; glands all pale, shortly striate towards midrib, otherwise punctate. *Inflorescence* 1–3(–10)-flowered, terminal (1–2 nodes), corymbose, and often also lateral, racemiform. *Flowers* 1 $\frac{1}{2}$ –3 cm  $\phi$ ,  $\pm$  concave; buds broadly ovoid to globose, obtuse to rounded. *Sepals* 3 $\frac{1}{2}$ –9 by (1–)2–6 $\frac{1}{2}$  mm, free,  $\pm$  imbricate, oblong or elliptic to obovate-spathulate, rounded, entire, midrib invisible or almost so; spreading or ascending in flower, ascending in fruit; glands all pale, linear. *Petals* bright yellow to golden yellow, 9–18 by 5–12 mm, broadly obovate to obovate-circular, entire, caducous; apiculus distinct to obscure,  $\pm$  rounded; glands all pale, linear. *Stamen fascicles* 5, 4–6(–8) mm long, c.  $\frac{1}{4}$ – $\frac{1}{2}$  as long as petals, each with 40–60 stamens, caducous; anthers bright yellow to orange-yellow, gland amber. *Ovary* 3–5 mm, ovoid to globose; styles 5, 2 $\frac{1}{2}$ –4 $\frac{1}{2}$  mm, (0.6–)0.7–0.9 times as long as ovary, partially or wholly outcurving, free; stigma narrowly capitate; placentae 5, axile. *Capsule* 7–11 mm, subglobose to globose. *Seeds* dark brown, c.  $\frac{1}{2}$  mm, cylindric-ellipsoid, not curved, slightly carinate, shallowly linear-reticulate.

Distr. Thailand, China (Yunnan, Szechuan), Tibet, Burma, Khasia and Himalaya from Assam to Kashmir, in *Malesia*: northern half of Sumatra (Mt Kerintji northward to Mt Telong in the Gajo Lands).

Ecol. Grassy or rocky slopes, pastures, thickets, open woodland and montane forest, 1700–3300 m.

Note. The Sumatran form of *H. uralum* tends to be more luxuriant and to have larger flowers than those elsewhere; but its more erect habit is matched by some Nepal specimens. The form in cultivation in Europe, dwarfer, with arching

frondose branches and small flowers, is apparently confined to the Himalaya; but the variation between these extreme forms appears continuous.

**3. *Hypericum monogynum* LINNÉ**, Sp. Pl. ed. 2 (1763) 1107; MILL. Gard. Dict. ed. 8 (1768) no 11; BL. Bijdr. 1 (1825) 141. — *H. chinense* LINNÉ, Syst. Nat. ed. 10, 2 (1759) 1184, non OSBECK, Dagbok Ostind. Resa (1757) 244; Amoen. Acad. 8 (1785) 323; CURTIS, Bot. Mag. 10 (1796) t. 334; CHOISY, Prod. Monogr. Hypér. (1821) 40; in DC. Prod. 1 (1824) 545; in Zoll. Syst. Verz. (1854) 150; PL. Jav. (1858) 5; HASSK. Pl. Jav. Rar. (1848) 278; FORB. & HEMSLEY, J. Linn. Soc. Bot. 23 (1886) 72; BACK. Schoöfl. Java (1911) 87; HAYATA, Ic. Pl. Formos. 1 (1911) 78; KELLER in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 176; HAND-MAZZ. Symb. Sin. 7 (1931) 401; BACK. & BAKH. f. Fl. Java 1 (1963) 382; ROBSON, J. R. Hort. Soc. 95 (1970) 489. — *H. aureum* LOUR. Fl. Coch. (1790) 472. — *Norysca chinensis* (L.) SPACH, Hist. Nat. Vég. Phan. 5 (1836) 427; Ann. Sc. Nat. II, Bot. 5 (1836) 364; BL. Mus. Bot. Lugd. Bat. 2 (1856) 22; MIQ. Fl. Ind. Bat. 1, 2 (1859) 514; KIMURA in Nakai & Honda, Nova Fl. Jap. 10 (1951) 103. — *Norysca aurea* (LOUR.) BL. Mus. Bot. Lugd. Bat. 2 (1856) 22. — *Norysca punctata* BL. l.c. 23. — *H. chinense* ssp. *obtusifolium* O.K. Rev. Gen. Pl. 1 (1891) 60.

Bushy shrub,  $\frac{1}{4}$ –1.3 m, with spreading branches; branchlets 2(–4)-lined when young, eventually becoming terete. Leaves sessile or with petiole up to  $\frac{1}{4}$  mm, 2– $4\frac{1}{2}$  by 1– $1\frac{1}{4}$  cm, elliptic or oblong to oblanceolate, apex obtuse or minutely apiculate to rounded, base cuneate to rounded or subcordate paler below; 4–6 main lateral veins, with intramarginal vein and conspicuous dense reticulate venation; glands all pale, punctate. Inflorescence 1–c. 15-flowered, terminal (1–3 nodes), corymbose. Flowers 3–5 cm  $\sigma$ , plane or convex; buds ovoid, subacute to acute. Sepals  $4\frac{1}{2}$ –10 by  $1\frac{1}{2}$ –3 mm, free, imbricate, narrowly elliptic or narrowly oblong to lanceolate, acute or more rarely obtuse to rounded, entire, midrib invisible or almost so; spreading or ascending in flower and fruit; glands all pale, linear. Petals golden-yellow to lemon-yellow, 2–3 by  $1\frac{1}{4}$ – $1\frac{1}{2}$  cm, obovate, entire, caducous; apiculus variable, acute to rounded or absent; glands all pale, linear. Stamen fascicles 5, 18–28 mm long, almost equalling petals, each with 25–35 stamens, caducous; anthers bright yellow, gland amber. Ovary  $2\frac{1}{4}$ –4 mm, broadly ovoid to subglobose; styles 5, 12–18 mm, c.  $3\frac{1}{2}$ –5 times as long as the ovary, united almost to the apex; stigma small; placentas 5, axile. Capsule 6–10 mm, broadly ovoid or ovoid-conic to subglobose. Seeds dark reddish-brown, cylindric, curved, narrowly carinate, shallowly linear-reticulate to linear-foveolate.

Distr. SE. China, Taiwan. Introduced to England in 1753 and now cultivated in many parts of the world, including Java and Celebes.

Ecol. Only as a cultivated ornamental, largely in estates in hill stations up to c. 1800 m. Not quite hardy in temperate areas.

Notes. The plant cultivated in Malesia, to which the above synonymy and description refer, is the type form, with smaller, obtuse to rounded leaves and smaller flowers, which is native to Kwangtung and adjacent parts of China. The plant

with larger, acute leaves and larger, more numerous flowers, known as *H. salicifolium* SIEB. & ZUCC., *H. chinense* var. *salicifolium* (SIEB. & ZUCC.) CHOISY, *H. chinense* ssp. *salicifolium* (SIEB. & ZUCC.) O. K., etc., appears to intergrade with the typical one in China, so that segregation, even as a variety, is not possible.

Unfortunately the epithet *chinense* cannot be maintained.

**4. *Hypericum geminiflorum* HEMSLEY**, Ann. Bot. 9 (1895) 144; LÉV. Bull. Soc. Bot. Fr. 54 (1908) 590; HAYATA, Ic. Pl. Formos. 1 (1911) 76; *ibid.* 3 (1913) 41. — *H. trinervium* HEMSLEY, Ann. Bot. 9 (1895) 144; LÉV. Bull. Soc. Bot. Fr. 54 (1908) 590; HAYATA, Ic. Pl. Formos. 1 (1911) 79. — *H. loheri* MERR. Philip. J. Sc. 4 (1909) Bot. 294; EN. Philip. 3 (1923) 75. — *H. acutisepalum* HAYATA, J. Coll. Sc. Tokyo 30, 1 (1911) 308; Ic. Pl. Formos. 1 (1911) 77, t. 15. — ? *H. pustulosum* KELLER in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 176. — *H. lackeyi* ELM. Leaflet. Philip. Bot. 9 (1934) 3190. — *Takasagoya geminiflora* (HEMSLEY) Y. KIMURA, Bot. Mag. Tokyo 50 (1936) 501, f. 2; in Nakai & Honda, Nova Fl. Jap. 10 (1951) 93, t. 40. — *Takasagoya acutisepala* (HAYATA) Y. KIMURA, Bot. Mag. Tokyo 50 (1936) 501, f. 3 j-o; in Nakai & Honda, Nova Fl. Jap. 10 (1951) 92. — *Takasagoya trinervia* (HEMSLEY) Y. KIMURA, Bot. Mag. Tokyo 50 (1936) 503; in Nakai & Honda, Nova Fl. Jap. 10 (1951) 95.

Lax shrub,  $\frac{1}{2}$ – $1\frac{1}{2}$  m, branches long, often pendulous then ascending near apex; branchlets 4-lined when young, eventually becoming terete. Leaves subsessile, 2– $4\frac{1}{2}$  by 0.6–2.2 cm, oblong to elliptic or ovate-oblong, apex subacute to rounded, usually apiculate, base broadly to narrowly cuneate, paler below; c. 7 main lateral veins, uniting to form strong intramarginal vein, the reticulate venation not or scarcely visible; glands all pale, punctate. Inflorescence 1-flowered, terminal and on solitary or paired short shoots from up to 14 nodes below, more rarely axillary shoots 2(–3)-flowered with flowers pedunculate. Flowers 2–3 cm  $\sigma$ , plane; buds ovoid, acute or subacute. Sepals (1–) $1\frac{1}{2}$ – $2\frac{1}{2}$  by 1– $1\frac{1}{4}$ (–2) mm, free or connate at the base, broadly ovate or triangular or oblong-lanceolate or subcircular, subacute to rounded, entire, midrib invisible; spreading in flower, ascending in fruit; glands all pale, linear and punctate. Petals bright yellow, 9–15 by 5–7 mm, narrowly obovate, entire, caducous; apiculus absent; glands all pale, linear. Stamen fascicles 5, 6–10 mm long, c.  $\frac{3}{4}$  as long as petals, each with 6–11 stamens, caducous; anthers bright yellow, gland amber. Ovary  $2\frac{1}{4}$ – $3\frac{1}{4}$  mm, narrowly ellipsoid; styles 5, 4–6(–7) mm, c. 1.3–2 times as long as ovary, completely united; stigmas small; placentas 5, axile with small central lacuna. Capsule 8–11 mm, narrowly cylindric to narrowly cylindric-conic. Seeds dark reddish-brown, c.  $1\frac{1}{4}$  mm, fusiform to narrowly ovoid or narrowly cylindric, scarcely carinate, with long terminal appendage sometimes expanded to form narrow wing, very shallowly elongate-reticulate.

Distr. Taiwan, in Malesia: Philippines (Luzon).

Ecol. Stony places, river margins, 1000–1500 m.

Note. The Philippine plants should clearly be included in *H. geminiflorum*, while PRICE 688

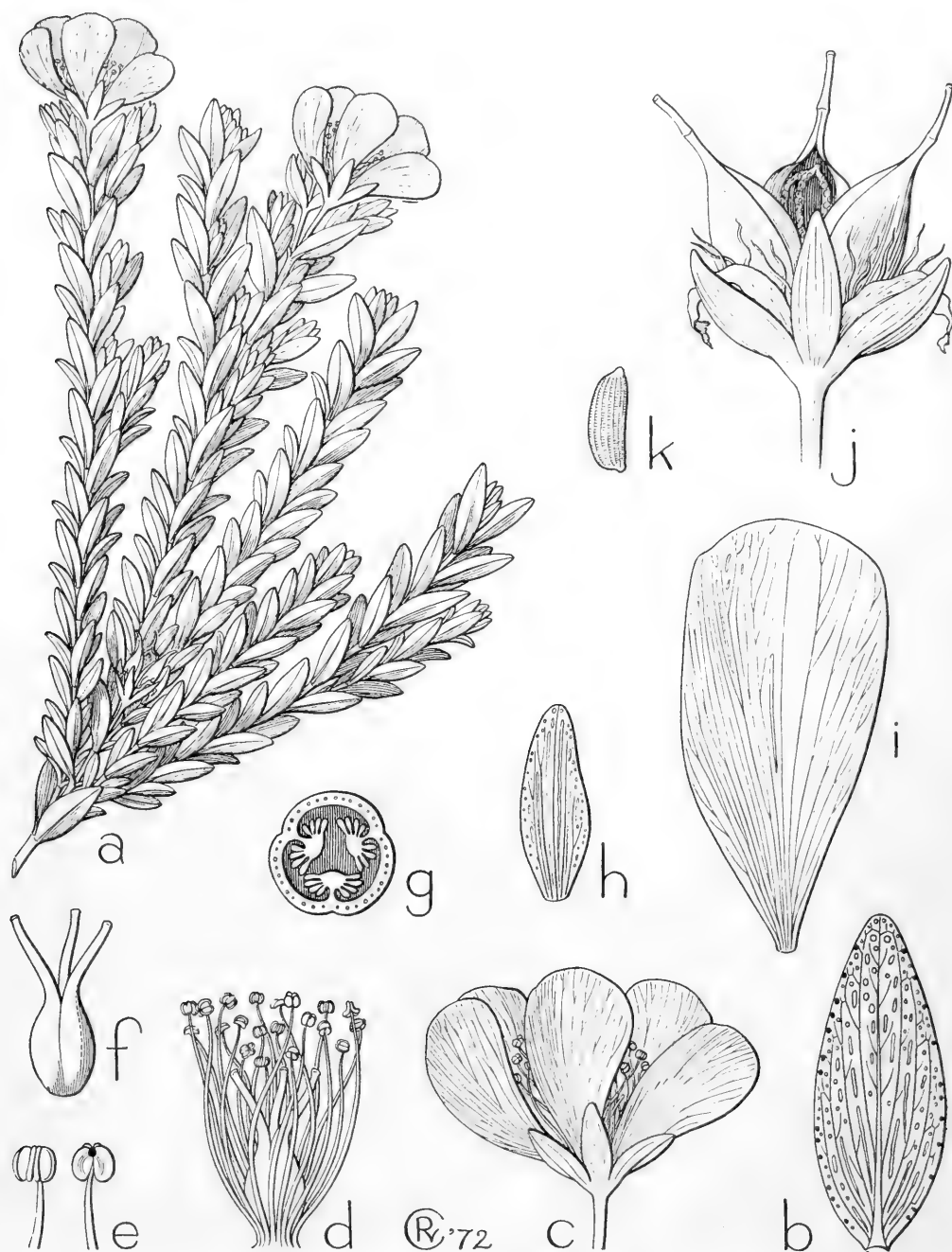


Fig. 14. *Hypericum sewense* N. ROBSON. a. Habit, nat. size, b. leaf, with black marginal dots,  $\times 4$ , c. flower,  $\times 2$ , d. pistil & stamens,  $\times 4$ , e. anther, with gland,  $\times 16$ , f. pistil,  $\times 4$ , g. cross section of ovary,  $\times 8$ , h. sepal,  $\times 4$ , i. petal,  $\times 4$ , j. dehiscent fruit,  $\times 4$ , k. seed,  $\times 16$  (a-k SAYERS NGF 21418).



(from Taiwan, Prov. Taitung) and HAYATA's and KIMURA's figures indicate that *H. acutisepalum* cannot be distinguished from it. *H. trinervium* seems rather distinct, at first glance, in having stouter shoots and pedicels and relatively broader leaves with a strong submarginal vein. As each of these characters appears in specimens of typical *H. geminiflorum*, although not in the same individual, it seems best to regard *H. trinervium* as a local race of *H. geminiflorum*.

**5. *Hypericum sewense* N. ROBSON, Blumea 20 (1972) 254. — Fig. 14.**

Erect shrub, 0.6 m, branches divaricate-ascending; branchlets 4-lined, flattened when young, soon 2-lined, eventually terete. *Leaves* sessile, 8–12 by 2–4 mm, lanceolate to narrowly elliptic, apex rounded, base narrowly cuneate-amplexicaul, concolorous, plane, spreading or ascending; c. 5 main lateral veins, mostly from basal loops,  $\pm$  parallel, branched above on outer side only, without marked reticulate venation; laminar glands pale, linear near the base, sometimes with rows of streaks or dots on either side, becoming punctate towards apex and margin; intramarginal glands pale and black. *Inflorescence* 1-flowered, without flowering shoots in uppermost axils or rarely with 1, branching profusely farther down; pedicels shorter than uppermost leaves, 4–8 mm in fruit. *Flowers* 2.2–2.8 cm  $\phi$ ,  $\pm$  plane; buds narrowly ovoid, subacute. *Sepals* 5–7 by 1½–2½ mm, free, imbricate, lanceolate, rounded to subacute, entire; laminar glands pale, mostly linear; submarginal glands pale or occasionally black. *Petals* bright yellow, 10–14 by 5–6½ mm, obovate, entire, persistent; apiculus almost absent; laminar glands pale, linear, sometimes interrupted distally; submarginal glands absent or 1–3, sessile, black, on or near apiculus. *Stamens* obscurely 3-fascicled, c. 20, longest 8–9 mm, c. ¾ as long as the petals, persistent; anthers bright yellow, gland black. *Ovary* 2½–3 mm, ovoid; styles 3, 2½–3 mm, equalling ovary, divergent; stigmas scarcely capitate; placentas 3, parietal. *Capsule* 7–9 by 4–5 mm, ovoid, longitudinally vittate. *Seeds* yellow-brown, c. 0.8 mm, cylindric, scarcely carinate, densely linear-foveolate.

*Distr. Malesia:* New Guinea (Madang Distr.), one collection. Fig. 15.

*Ecol.* Boggy tussock sedge-grassland, c. 2700 m.

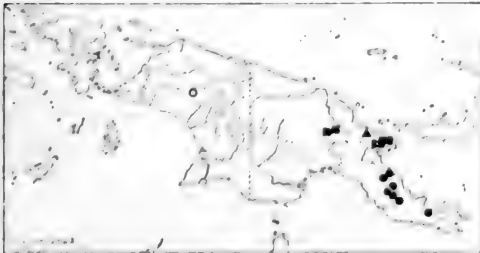


Fig. 15. Range of *Hypericum sewense* N. ROBSON (▲), *H. bifurcatum* N. ROBSON (■), *H. macgregorii* F.v.M. ssp. *macgregorii* (●) and ditto ssp. *punctatum* N. ROBSON (○).

Note. *H. sewense*, an apparently very local species, is the most primitive member of sect. *Humifusoidium*. Its nearest relatives belonging to another section are probably in sect. *Campylosporus*, from Africa, Madagascar and the Mascarene Is.

**6. *Hypericum macgregorii* F.v.M. Trans. R. Soc. Vict. 1, 2 (1889) 12; BURK. Kew Bull. (1899) 97; LAUT. Bot. Jahrb. 58 (1922) 4; STEEN. Bull. Jard. Bot. Btzg III, 13 (1934) 219. — Fig. 18f.**

Erect shrub, 0.15–1 m, branches strict, creeping and rooting at the base; branchlets 2-lined when young, eventually terete. *Leaves* sessile, 4–9 by 1–3 mm, ovate-lanceolate to elliptic or narrowly elliptic-oblong, apex subacute to rounded, base cuneate, concolorous, plane or  $\pm$  carinate,  $\pm$  imbricate-appressed; c. 6 main lateral veins,  $\pm$  parallel, not visibly branching, uniting near margin and apex, without visible reticulate venation; laminar glands pale, linear, becoming  $\pm$  interrupted or punctate towards margin; intramarginal glands pale or black. *Inflorescence* 1-flowered, without shoots in uppermost axils, branching farther down stem; pedicels usually shorter than uppermost leaves, 2–6(–10) mm in fruit. *Flowers* 2–2½ cm  $\phi$ ,  $\pm$  plane; buds narrowly ovoid, subacute. *Sepals* 3–6½ by ¾–2½ mm, free, not imbricate, elliptic to linear-lanceolate, subacute to obtuse or rarely rounded, entire; laminar glands pale, linear to punctate; submarginal glands pale or black. *Petals* dark yellow to pale yellow, sometimes red-tinged below, 7–15 by 3–6 mm, oblongate, entire, persistent; apiculus absent or almost so; laminar glands pale, linear, sometimes interrupted distally; submarginal glands absent. *Stamens* obscurely 3-fascicled, c. 17–24, longest 5–8 mm, c. ¾ as long as petals, persistent; anthers bright yellow, gland amber. *Ovary* 2 mm, ovoid; styles 3(–4), 2 mm, equalling ovary, divergent; stigmas not capitate; placentas 3 (4) axile. *Capsule* 6–8 by 3–4 mm, ovoid, longitudinally vittate. *Seeds* yellow-brown, c. 1 mm, cylindric to cylindric-ellipsoid, slightly carinate, densely linear-foveolate.

*ssp. macgregorii.*

Leaves with laminar glands linear, becoming interrupted or punctate towards margin; intramarginal glands pale. Sepals with laminar glands all or mostly linear; submarginal glands always pale.

*Distr. Malesia:* New Guinea (Morobe, Central and Milne Bay Distr.). Fig. 15.

*Ecol.* Open alpine grassland, usually in shallow soils, (1500–)2700–3900 m.

Note. The population on Mt Dayman (Maneo Ra.) is aberrant in having (a) leaves relatively broader (leaf index 2.2–3.1 compared with 2¼–3¼ in the typical form) with the apex less narrowed and (b) longer pedicels (5–10 mm in fruit compared with 2–6 mm in the typical form).

*ssp. punctatum* N. ROBSON, Blumea 20 (1972) 256.

Leaves with laminar glands mostly dots or short streaks; intramarginal glands black. Sepals with laminar glands punctate; submarginal glands sometimes black.

*Distr. Malesia:* New Guinea (Lake Habbema), one collection. Fig. 15.

Note. *Ssp. punctatum* is very similar in aspect to the Mt Maneao population.

**7. *Hypericum saruwagedicum* DIELS, Bot. Jahrb. 62 (1929) 482. — *H. macgregorii* (non F.v.M.) HooGL. Blumea, Suppl. 4 (1958) 231. — Fig. 18e.**

Erect, bushy shrub, 0.1–1.2 m, branches strict, creeping and rooting at the base; branchlets 4-lined when young, soon 2-lined, eventually terete. *Leaves* sessile, 2–9 by  $\frac{1}{2}$ –3 mm, narrowly elliptic or lanceolate-elliptic to linear, apex rounded, base narrowly cuneate, concolorous, incurved and slightly carinate at the base,  $\pm$  imbricate-appressed; c. 6 main lateral veins,  $\pm$  parallel, not visibly branching, uniting near margin and apex, without visible reticulate venation; laminar glands pale, linear, sometimes interrupted near margin; intramarginal glands pale only or pale and black. *Inflorescence* 1-flowered, with shoots in uppermost axils, branching farther down stem; pedicels shorter than uppermost leaves, 2–4(–6) mm long in fruit. *Flowers* 1–2½ cm  $\sigma$ , plane or  $\pm$  concave; buds narrowly ovoid-cylindric, subacute to rounded. *Sepals* 3½–8 by 1–3 mm, free, imbricate or not, ovate or lanceolate to elliptic or narrowly oblong, subacute to rounded, entire; laminar glands pale, all or mostly linear; submarginal glands pale only or pale or black. *Petals* dark yellow to pale yellow, sometimes red-tinged below, 7–15 by 3–6 mm, oblanceolate, persistent; apiculus absent or almost so; margin entire, or rarely with a few  $\pm$  prominent marginal glands; laminar glands pale, linear, sometimes interrupted distally; marginal glands black or absent. *Stamens* not obviously in fascicles, 13–26, longest 4–7(–8) mm c.  $\frac{1}{2}$ –¾ as long as the petals, persistent; anthers bright yellow, gland amber or black. *Ovary* 2–3 mm, ovoid; styles 3, 1¼–2½ mm,  $\frac{1}{2}$ –¾ as long as the ovary, divergent; stigmas  $\pm$  capitate; placentas 3, parietal, intrusive. *Capsule* (5½–)6–9 by 3¼–5 mm, ovoid, longitudinally vittate. *Seeds* orange-brown,  $\frac{1}{2}$ –¾ mm, cylindric, carinate, densely linear-foveolate.

Distr. *Malesia*: New Guinea (Mts Wilhelmina & Carstensz, Lake Habbema, E. Highlands, Madang, Morobe, Central & Milne Bay Distr.). Fig. 16.

Ecol. Alpine grassland or open scrub, usually in well-drained soil, 2800–4300 m, but to c. 1800 m in Milne Bay District.

Notes. *H. saruwagedicum* is a variable species in which the variation falls into four geographical, more or less morphological intergrading races.

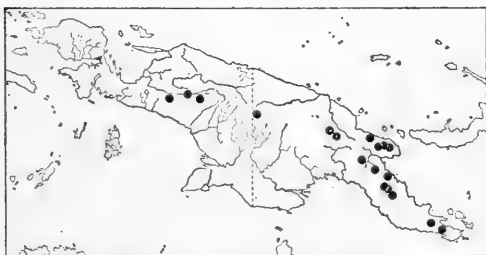


Fig. 16. Range of *Hypericum saruwagedicum* DIELS.

Although it does not appear desirable to name these formally, average members can be recognised by the following characters:

Variant 1 (Mt Wilhelm): Leaves large. Flowers large. Black glands usually on leaves and sepals, not on petals or anthers. Shoot apex outcurving.

Variant 2 (Territory of New Guinea except Mt Wilhelm, West Papua): Leaves medium. Flowers medium to large. Black glands on anthers only or absent. Shoot apex erect.

Variant 3 (West New Guinea): Leaves small. Flowers large. Black glands on leaves, sepals, petals and anthers. Shoot apex sometimes outcurving.

Variant 4 (Papua, Milne Bay District): Leaves small. Flowers small. Black glands on anthers and (rarely) leaves. Shoot apex erect.

**8. *Hypericum bifurcatum* N. ROBSON, Blumea 20 (1972) 256. — Fig. 18d.**

Erect shrub (? or woody herb),  $\frac{1}{4}$ –1½ m, branches  $\pm$  strict, rooting at the base; branchlets 2-lined when young, eventually terete. *Leaves* sessile, 7–13(–16) by  $\frac{1}{2}$ –6 mm, narrowly ovate to narrowly elliptic-oblong, apex rounded, base cuneate to rounded, concolorous, plane, ascending or appressed; c. 7 main lateral veins, mostly from basal loops,  $\pm$  parallel, little branched, uniting near margin and apex, without marked reticulate venation; laminar glands pale, linear, sometimes with rows of dots on either side, becoming  $\pm$  interrupted towards margin; intramarginal glands pale only. *Inflorescence* 1-flowered, with strong flowering shoots in uppermost axils and often weaker ones in axils immediately below, the repeated branching producing an effect of bifurcation; pedicels equalling or exceeding uppermost leaves, 8–15 mm, long in fruit. *Flowers* 1¼–2½ cm  $\sigma$ , plane; buds narrowly ovoid, rounded. *Sepals* 4–6 by 1½–2 mm, free, imbricate, ovate-lanceolate, subacute, entire; laminar glands pale, all or mostly linear; submarginal glands pale or reddish. *Petals* bright yellow, orange- or red-tinged below, 9–14 by 3–5 mm, obovate to oblanceolate, entire, persistent; apiculus absent or almost so; laminar glands pale, linear, sometimes interrupted distally; marginal glands absent or one, sessile, reddish, on apiculus. *Stamens* obscurely 3-fascicled, 25–35, longest 6–8 mm, c.  $\frac{1}{4}$  as long as the petals, persistent; anthers bright yellow, gland black. *Ovary* 2 mm, ovoid; styles 3, 2 mm, equalling the ovary, divergent; stigmas narrowly capitate; placentas 3, parietal except at the very base. *Capsule* 6–9 by 3¼–4½ mm,  $\pm$  broadly to narrowly ovoid or ovoid-pyramidal, longitudinally vittate. *Seeds* yellow-brown, c.  $\frac{1}{4}$  mm, cylindric to cylindric-ellipsoid, slightly carinate, densely linear-foveolate.

Distr. *Malesia*: New Guinea (E. Highlands & Morobe Distr.). Fig. 15.

Ecol. Wet to dry grassland, c. 2200–3000 m.

Note. The pair of flowering shoots in each uppermost axil distinguishes *H. bifurcatum* from all other members of sect. *Humifusoidium* except some forms of *H. papuanum* in which, however, the leaf gland pattern differs and 4–5 styles often occur.

**9. *Hypericum papuanum* RIDL, Trans. Linn. Soc. II, Bot. 9 (1916) 19; LAUT. Bot. Jahrb. 58 (1922)**

5; STEEN. Bull. Jard. Bot. Btzg III, 13 (1934) 219. — *H. japonicum* (non THUNB. ex MURR.) WARB. Bot. Jahrb. 16 (1893) 14. — *H. macgregorii* (non F.v.M.) LAUT. Nova Guinea 8 (1912) 843. — *H. hellwigii* LAUT. Bot. Jahrb. 58 (1922) 4; KELLER in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 181; STEEN. Bull. Jard. Bot. Btzg III, 13 (1934) 219. — *H. habbemense* A. C. SMITH, J. Arn. Arb. 22 (1941) 343. — Fig. 18c.

Erect or  $\pm$  straggling shrub or woody herb, 0.1–1.3 m, branches strict or  $\pm$  lax, creeping and rooting at the base; branchlets 2–4-lined when young, eventually terete. Leaves sessile, 0.6–2.5 by 0.3–1.7 cm, narrowly ovate or ovate-triangular to elliptic or broadly ovate or subcircular, apex subacute or rarely acute to rounded, base rounded to cordate, concolorous, plane, spreading or ascending; 4–5(–6) main lateral veins,  $\pm$  parallel or diverging, much branched, uniting near margin and apex, with marked, usually  $\pm$  dense, reticulate venation; laminar glands pale, linear towards the base or wholly punctate and striate or punctate only; intramarginal glands pale only or partly or wholly black. Inflorescence 1-flowered, with or without flowering shoots in uppermost axils, or regularly dichasial or intermediate and irregular; pedicels usually exceeding uppermost leaves, 4–20 mm in fruit. Flowers 1.8–2.6 cm  $\phi$ , plane; buds ovoid to ellipsoid, subacute. Sepals 3–7(–8) by 1–2½(–3½) mm, free, imbricate, ovate to lanceolate or narrowly oblong or sometimes broadly ovate and foliaceous, acute to rounded, entire; laminar glands pale, linear; submarginal glands black or absent. Petals bright yellow, 9–15 by 4–9 mm, obovate, entire, persistent; apiculus short or obsolete; laminar glands pale, linear, sometimes striate distally; marginal glands absent or black, sometimes only in apiculus, rarely few to numerous elsewhere on margin. Stamens not obviously in fascicles (15–)25–40(–50), longest 6–9 mm, c.  $\frac{3}{4}$  as long as the petals, persistent; anthers bright yellow, gland amber or occasionally black. Ovary (2–)2½–3(–4) mm, narrowly or rarely broadly ovoid; styles 3 (4–5), 2–3 mm,  $\frac{3}{4}$  as long to as long as the ovary, divergent; stigmas narrowly to broadly capitate; placentas 3(–4–5), parietal. Capsule (5–)7–9(–10) by 3–4½ mm, narrowly ovoid or rarely broadly ovoid to ellipsoid, longitudinally vittate. Seeds yellow-brown to dark brown, 0.7–0.8 mm, cylindric or subcylindric, scarcely carinate, densely linear-foveolate to linear-scalariform.

Distr. *Malesia*: New Guinea (widespread in all mountainous regions). Fig. 17.

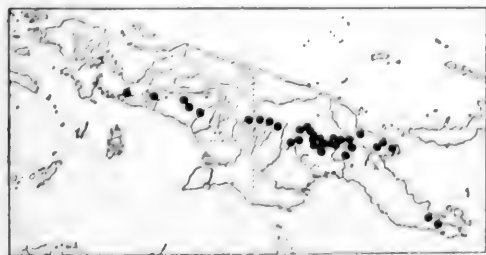


Fig. 17. Range of *Hypericum papuanum* RIDL.

Ecol. Wet to dry alpine grassland and bogs, screes, 1800–3800 m.

Note. *H. papuanum* is a very variable species in which the extreme forms, although quite distinct in appearance, are linked by intermediates with varying combinations of characters, so that the morphological trends are not coordinated. These trends are:

- (1) Leaves narrowly ovate and  $\pm$  crowded with laminar glands mostly linear (in E., W. and S.

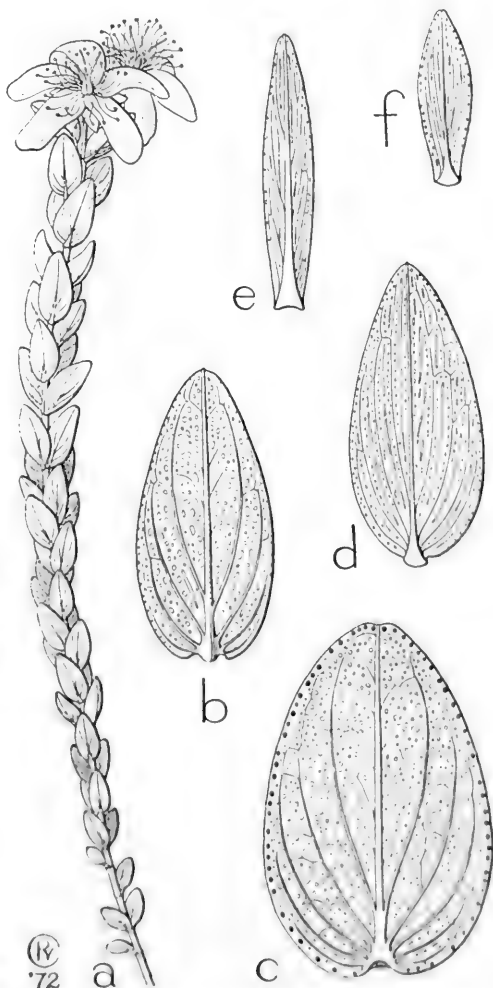


Fig. 18. *Hypericum pulgense* MERR. a. Habit, nat. size, b. leaf,  $\times 4$ . — Leaves from underside of: c. *H. papuanum* RIDL.,  $\times 4$ , d. *H. bifurcatum* N. ROBSON,  $\times 4$ , e. *H. saruwagedicum* DIELS,  $\times 10$ , f. *H. macgregorii* F.v.M.,  $\times 4$  (a–b ROBBINS s.n., dd. 25–10–1965, c SAYERS NGF 21419, d NGF 15969, e HOOGLAND 10002, f HARTLEY NGF 12799).

- Highlands mainly) to broadly ovate or sub-circular, not crowded, with laminar glands all punctiform (constant in W. New Guinea and E. Papua, Northern and Milne Bay Districts).
- (2) Leaves, sepals, petals and anthers without black glands (mainly eastern) to with black glands, forming a continuous intramarginal row in the leaves (constant in W. New Guinea) and sepals and a continuous marginal row in the petals (rare).
  - (3) Inflorescence 1-flowered (mainly eastern) to regularly dichasial (mainly western).
  - (4) Styles and placentae 3 with ovary and capsule narrowly ovoid (mainly eastern) to styles and placentae 4-5 with ovary and capsule  $\pm$  broadly ovoid (mainly western). According to A. C. SMITH, l.c., *H. habbemense* may have up to 6 styles but only up to 5 placentae. A re-examination of the syntype material has failed to reveal an ovary with 6 styles and 5 placentae, a combination of characters that is probably teratological in origin.
  - (5) Habit dense with  $\pm$  ascending branches (widespread) to lax with  $\pm$  spreading branches (Madang and Morobe Districts).

**10. *Hypericum pulogense* MERR.** Philip. J. Sc. 5 (1910) Bot. 364; En. Philip. 3 (1923) 75. — Fig. 18a-b.

Suffrutescent herb, 20-40 cm, branches strict, erect or ascending to decumbent from slender branching rhizome, 2(4-6)-lined or narrowly 2-winged when young, sometimes eventually terete. *Leaves* sessile or very shortly petiolate, 0.8-1.2(-2) by 0.3-0.7 cm, elliptic to oblong or ovate, apex obtuse to rounded, base broadly cuneate to rounded, glaucous beneath, margin recurved (at least when dried), spreading or ascending; *c.* 4 main lateral veins,  $\pm$  parallel, slightly branched, uniting near margin and apex, with scarcely visible reticulate venation; laminar glands pale,  $\pm$  prominent, punctate and shortly striate; intramarginal glands pale or apparently absent. *Inflorescence* 1-flowered, with or without flowering shoots in uppermost axils, or regularly dichasial with 3-c. 10 flowers; pedicels shorter than uppermost leaves, 4-6 mm in fruit. *Flowers* 2-2½(-3) cm  $\phi$ , plane; buds narrowly ovoid, subacute to obtuse. *Sepals* 4-6 by 1.8-2.4 mm, free, imbricate, lanceolate to oblong or elliptic-oblong, rounded or subapiculate, entire; laminar glands pale, linear and punctate; submarginal glands pale. *Petals* bright yellow, 10-12(-14) by 4-6 mm, narrowly oblong-obovate, entire to subentire, persistent; apiculus small, glandular; laminar glands pale, linear, becoming striate and punctate distally; marginal glands pale. *Stamens* not obviously in fascicles (or in 5 fascicles, *fide* MERRILL), *c.* 30-60, longest *c.* 9 mm, *c.* ¾ as long as the petals, persistent; anthers bright yellow, gland amber. *Ovary* 3-4 mm, broadly to narrowly ovoid; styles 3, *c.* 5 mm, 1.4-2 times as long as ovary, divergent; stigmas not capitate; placentas 3, axile. *Capsule* 5-8 by 4-5 mm, narrowly ovoid to ovoid, longitudinally and diagonally vittate. *Seeds* yellow-brown to dark brown, ¼-1 mm, cylindric, not carinate, densely linear-scalariform.

Distr. *Malesia*: Philippines (Luzon). Fig. 20.

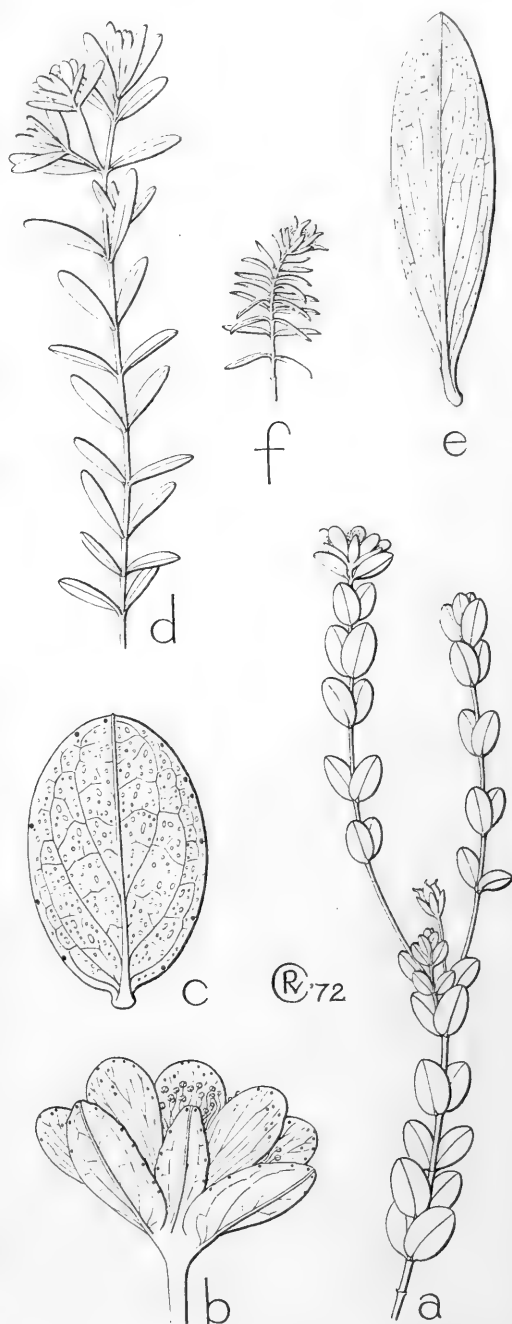


Fig. 19. *Hypericum beccarii* N. ROBSON. a. Habit, nat. size, b. flower,  $\times 4$ , c. leaf,  $\times 4$ . — *H. beccarii* ssp. *stenisii* N. ROBSON. d. & f. Habit, nat. size, e. leaf,  $\times 4$  (a-c BÜNNEMEIJER 976a, d-e VAN STEENIS 8514, f VAN STEENIS 9599).

Ecol. Summit grasslands and open places in mossy forest, c. 2800 m.

Note. *H. pulogense* is known only from Mt Pulog and Mt Tabayoc. Its nearest relatives (other than *H. beccarii*) are in New Guinea. The only specimen from Mt Tabayoc has slenderer, more decumbent stems than those from Mt Pulog. In these respects it approaches *H. beccarii*.

**11. *Hypericum beccarii*** N. ROBSON, *Blumea* 20 (1972) 260. — *H. japonicum* var. *pinnatinervium* BAKH. f. in Bakh. & Bakh. f. *Fl. Java* 1 (1963) 382, descr. angl. — Fig. 19.

Weak perennial (? or annual) herb, c. 2–45 cm, stems wiry, decumbent or ascending (or erect *fide* BAKH. f.), creeping and branching irregularly, rooting at the base, narrowly 4–6-lined when young, often becoming 2-lined. Leaves 0.2–1½ mm petiolate, 2½–10½ by ½–6 mm, broadly oblong or elliptic-oblong to oblanceolate or linear, apex rounded to subacute, apiculate to muticous, base rounded to cuneate, glaucous beneath, margin not or slightly recurved, spreading; c. 3 main lateral veins, ± parallel, with reticulate branchings, uniting near margin and apex with dense conspicuous reticulate venation; laminar glands pale, ± prominent or not, irregularly punctate; intramarginal glands dark or pale, irregular. Inflorescence 1-flowered, with flowering shoots in uppermost axil(s); pedicels usually exceeding uppermost leaves, (2–)5–17 mm in fruit. Flowers c. 7–10 mm ø, plane; buds narrowly ovoid, obtuse. Sepals 2½–5 by 0.6–1.4 mm, free, ± broadly or not imbricate, elliptic-oblong to linear, rounded to subacute or apiculate; margin entire to irregularly glandular-ciliate; laminar glands pale, punctate to shortly striate; submarginal to marginal glands black. Petals yellow, 3–7 by 2–2½ mm, oblong-oblanceolate, persistent; apiculus small, glandular or glandular-ciliate; margin entire or with few subsessile glands; laminar glands absent or few near apex, pale or black, punctate; marginal glands black. Stamens in 3 fascicles, c. 15–22, longest 2½–5½ mm, c. ¾–¾ as long as the petals, persistent; anthers yellow, gland black. Ovary ½ mm long, narrowly ovoid; styles 3, c. 1½ mm, about as long as the ovary, gradually divergent; stigmas slightly capitate; placentas 3, axile. Capsule 3–5½ by 2–3½ mm, ± narrowly ovoid, densely and ± prominently longitudinally vittate or almost smooth. Seeds reddish brown, 0.7–0.9 mm, cylindric, not carinate, densely shallowly linear-reticulate.

*ssp. beccarii*. — Fig. 19a–c.

Leaves 0.2–1 mm petiolate, 0.4–1 by 0.2–0.6 cm, broadly oblong or elliptic-oblong to narrowly obovate, apex rounded, apiculate to muticous, base rounded to cuneate; laminar glands ± prominent. Sepals 3½–5 by 1–2 mm, ± broadly imbricate. Petals 5–7 mm; laminar glands (when present) black. Stamens c. 20–22, longest 4¼–5½ mm. Capsule 4–5½ by 2¼–3¼ mm, densely and ± prominently vittate.

Distr. *Malesia*: West Central Sumatra (Mts Singalang, Talang, Talamau, Kerintji), W. Java (Mt Papandajan, once collected). Fig. 20.

Ecol. Between 1800 and 3000 m.

Note. The specimens with broad leaves and

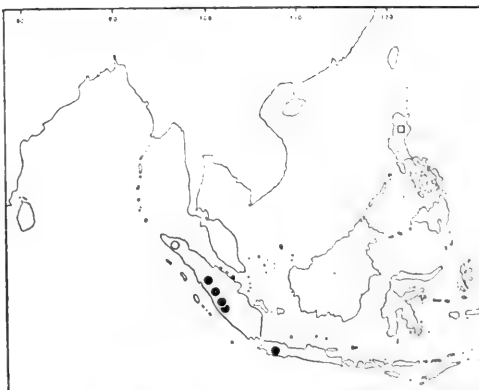


Fig. 20. Range of *Hypericum pulogense* MERR. (□), *H. beccarii* N. ROBSON ssp. *beccarii* (●) and ditto ssp. *stenisii* N. ROBSON (○).

large flowers (from Mts Talamau and Singalang) approach most closely to *H. pulogense* and other related species in this section. The Javanese specimens, although smaller in all parts, cannot otherwise be separated from those of Central Sumatra.

*ssp. steenisii* N. ROBSON, *Blumea* 20 (1972) 261. — Fig. 19d–f.

Leaves ½–1½ mm petiolate, 2½–10½ by ¼–4 mm, oblanceolate to linear, apex rounded to subacute, ± apiculate, base cuneate; laminar glands not prominent. Sepals 2½–5 by 0.6–1.4 mm, not imbricate. Petals 3–6 mm; laminar glands (when present) pale. Stamens c. 15–20, longest 2¼–4½ mm. Capsule 3–4½ by 2–3 mm, sparsely and obscurely longitudinally vittate (± smooth).

Distr. *Malesia*: N. Sumatra (Gajo Lands; Mts Losir & Kemiri). Fig. 20.

Ecol. Along streamlets, in open vegetation, 2700–3300 m.

Note. *Ssp. steenisii* differs essentially from *ssp. beccarii* in having narrower leaves and smooth capsules with few vittae.

**12. *Hypericum pseudopetiolum*** R. KELLER, Bull. Herb. Boiss. 5 (1897) 638; Y. KIMURA, J. Jap. Bot. 15 (1939) 295; in Nakai & Honda, Nova Pl. Jap. 10 (1951) 197, ff. 68, 69. — *H. taihezanense* S. SUZUKI, Trans. Nat. Hist. Soc. Formosa 20 (1930) 239; Ann. Rep. Taihoku Bot. Gard. 1 (1931) 158; in Masamune, Short Fl. Formosa (1936) 141. — *H. pseudopetiolum* var. *taihezanense* (S. SUZUKI) Y. KIMURA, J. Jap. Bot. 15 (1939) 296; Bot. Mag. Tokyo 54 (1940) 81; in Nakai & Honda, Nova Pl. Jap. 10 (1951) 204.

Perennial herb, 15–40 cm, stems slender, ascending, branching above, not rooting, terete. Leaves sessile or up to ¼ mm petiolate, 4–17 by 2–6 mm, lanceolate or ovate to elliptic-oblong, apex rounded, base cuneate to rounded (or the upper ones sometimes cordate-amplexicaul), paler beneath; 3–4 main lateral veins, with reticulate branchings, uniting near margin and apex; reticulate venation ± marked, dense; laminar glands pale, large, often prominent, dense, punctate;

intramarginal glands black, dense. *Inflorescence* 1-c. 10-flowered, cymose, monochasial after 2nd grade, lax; pedicels sometimes exceeding uppermost leaves, 3–6 mm in fruit. *Flowers* 8–10 mm  $\sigma$ , concave; buds ellipsoid, obtuse. *Sepals* 3–5½ by 1–1½ mm, free, imbricate, lanceolate to elliptic-oblong, obtuse to rounded, entire; laminar glands pale, punctate or shortly striate, few; submarginal glands all black or basal ones pale. *Petals* yellow, 5–6 by 2 mm, narrowly obovate or oblong-obovate, persistent; apiculus absent; margin entire or with 1–2 subapical prominent glands; laminar glands absent or few near apex, pale, punctate; marginal glands black, few, sometimes prominent. *Stamens* in 3 (abnormally 4–5) fascicles, c. 30, longest c. 4 mm, c. ½ as long as the petals, persistent; anthers yellow; gland black. *Ovary* c. 3 mm, ellipsoid; styles 3 (abnormally 4–5), 1½ mm, shorter than ovary, divergent; stigmas scarcely capitate; placentas 3 (abnormally 4–5), axile. *Capsule* 4–5 by 3–4 mm, broadly ovoid to subglobose, longitudinally vittate. *Seeds* mid-brown, ½ mm, cylindric-ellipsoid, not carinate, densely shallowly reticulate-scalariform.

*Distr.* Taiwan (north and central), and Japan (north to southern Hokkaido), in *Malesia*: Philippines (Luzon, Pawai).

*Ecol.* Occurs at 2100 m in Luzon, but reaches 2500 m near Arisan in Taiwan.

*Note.* The Philippine plant resembles some of the specimens from Taiwan. The variation in that island, however, overlaps that of the Japanese *H. pseudopetiolum* to such an extent that it is impossible to recognise *H. taihezanense*, even at varietal level.

**13. *Hypericum petiolulatum* HOOK. f. & THOMS. ex DYER**, Fl. Br. Ind. 1 (1874) 255; LÉV. Bull. Soc. Bot. Fr. 54 (1908) 594; HAND.-MAZZ. Symb. Sin. 7 (1931) 402; GAGNEP. Fl. Gén. I.-C. Suppl. 1 (1943) 248. — *H. thomsonii* R. KELLER, Bot. Jahrb. 33 (1904) 552, *thoquad typum*. — *H. mutilum* (non L.) RIDL. J. Fed. Mal. Stat. Mus. 8 (1917) 17. — *H. petiolatum* (non L., nec L.f., nec WALT., nec LOUR.) R. KELLER in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 179.

Annual herb, 10–60 cm, stems erect to ascending or procumbent, branching  $\pm$  widely, rooting, terete. *Leaves* 1–3 mm petiolate, 0.9–3 by 0.5–1 (–1.6) cm, oblong or lanceolate-elliptic to obovate or subcircular, apex rounded or rarely obtuse, base cuneate or attenuate to rarely rounded,  $\pm$  glaucous beneath; 3 main lateral veins, not or scarcely branched, uniting near margin and apex; reticulate venation obscure, rather dense to lax; laminar glands pale, very rarely with 1–2 black, large, usually  $\pm$  prominent,  $\pm$  dense, punctate; intramarginal glands black,  $\pm$  dense or irregular. *Inflorescence* (1–)3–9-flowered, cymose, with subsidiary inflorescences on often long lateral branches, monochasial after 1st grade, lax; pedicels exceeding uppermost leaves, 4–13 mm in fruit. *Flowers* 5–7 mm  $\sigma$ , plane; buds ellipsoid, obtuse. *Sepals* 2.3–3.4 by 0.5–0.9 mm, free, not imbricate, linear to very narrowly oblong-lanceolate, entire; very acute (or rarely (Nepal) narrowly elliptic-oblong and subacute); laminar glands pale or rarely black, punctate to linear, variable in size and number; marginal glands black, few, some-

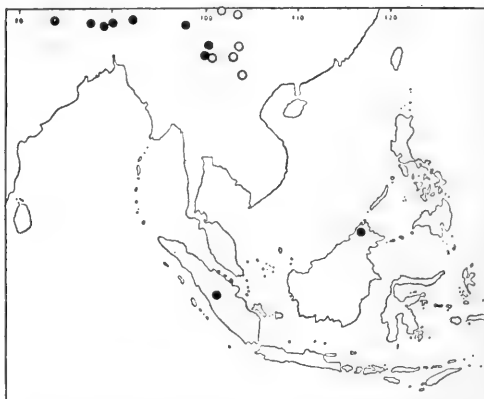


Fig. 21. Range of *Hypericum petiolulatum* HOOK. f. & THOMS. ex DYER ssp. *petiolulatum* (●) and ditto ssp. *yunnanense* (FRANCH.) N. ROBSON (○).

times one apical, or all absent. *Petals* yellow, 4–5½ by 1–1¼ mm, oblanceolate, entire, persistent; apiculus small, acute, subapical; laminar glands absent or 1–2, pale, punctate; marginal glands black, 1–2 on or near the apiculus and occasionally also elsewhere. *Stamens* in 3 fascicles, 9–22, longest (2¼–)3–4½ mm, c. ¾ as long as the petals; anthers yellow, gland black. *Ovary* 1½–2 mm,  $\pm$  broadly ovoid to subglobose; styles 3 (–4), 1–2.1 mm, ¾–1¼ times as long as the ovary, divergent; stigmas not or scarcely capitate; placentas 3 (–4), axile. *Capsule* 3–5 by 3–5 mm, broadly ovoid to globose, longitudinally vittate. *Seeds* yellow-brown, 0.5–0.6 mm, cylindric, not carinate, densely shallowly reticulate-scalariform.

*Distr.* Nepal to Burma and Yunnan, in *Malesia*: Sumatra (Mt Kerintji), N. Borneo (Mt Kinabalu). Fig. 21.

*Ecol.* Stream banks in peaty or stony soil, 2000–2400 m.

*Note.* *H. petiolulatum* is variable, but the Malesian specimens fall within the range of variation of the type subspecies. On the other side of the Himalayan Range, in Yunnan and Szechuan, it is represented mostly by ssp. *yunnanense* (FRANCHET) N. ROBSON, in which the styles are longer than the ovary, the capsule is  $\pm$  broadly ovoid, the leaf lamina is usually broadest at or below the middle and often larger than in ssp. *petiolulatum*, the branching is more regular, and the main inflorescence usually occupies 2–3 nodes.

**14. *Hypericum gramineum* G. FORSTER**, Fl. Ins. Austr. Prodr. (1786) 53; VAHL, Symb. Bot. 2 (1791) 86; BAILEY, Rep. Austr. Ass. Adv. Sc. 7 (1898) 429; Queensl. Fl. 1 (1899) 100; HOCHR. Candollea 2 (1925) 437; R. KELLER in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 183; GUILLAUMIN, Fl. Nouv. Caléd. (1948) 217. — *Ascyrum involutum* LABILL. Nov. Holl. Pl. Spec. 2 (1806) 32, t. 174. — *H. involutum* (LABILL.) CHOISY, Prod. Monogr. Hypér. (1821) 50; in DC. Prod. 1 (1824) 549. — *Brathys billardieri* SPACH, Ann. Sc. Nat. II, Bot. 5 (1836) 367. — *Brathys forsteri* SPACH, l.c. — *H. pedicellare* ENDL. En. Pl. Hueg. (1837) 12. — *H. aureum* BANKS & SOL. ex HOOK. f. Fl. Nov. Zel. 1



(1853) 36, in *synon.* — *H. lalandii* (non CHOISY) DYER, Fl. Br. Ind. 1 (1874) 256; LÉV. Bull. Soc. Bot. Fr. 54 (1908) 589, 593; R. KELLER, Bull. Herb. Boiss. II, 8 (1908) 187, *pro parte*; in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 181, *pro parte*; HAND.-MAZZ. Symb. Sin. 7 (1931) 404; KANJILAL & DAS, Fl. Assam 1, 1 (1935) 100. — *H. foetidum* HOOK. f. & THOMS. ex DYER, Fl. Br. Ind. 1 (1874) 257, in *synon.* — *H. japonicum* var. *australe* R. KELLER, Bull. Herb. Boiss. II, 8 (1908) 186. — *H. japonicum* var. *lanceolatum* Y. KIMURA, Bot. Mag. Tokyo 54 (1940) 88. — *Sarothra saginoides* Y. KIMURA in Nakai & Honda, Nova Fl. Jap. 10 (1951) 246, t. 81. — *Sarothra graminea* (G. FORSTER) Y. KIMURA, l.c. 232.

Perennial or annual herb, (2½–)5–72 cm, with stems erect or decumbent, branching strictly from the base (rarely elsewhere) or unbranched below the inflorescence, not rooting, 4-lined. *Leaves* sessile, 0.4–2.5 by 0.12–0.8 cm, lanceolate to linear or oblong or rarely ovate-lanceolate, apex obtuse to rounded, base cordate to rounded or sometimes cuneate, amplexicaul, ± glaucous beneath; 1–3 main basal veins, not or scarcely branched, with 1 or more lateral veins often visible; reticulate venation absent; laminar glands pale, not prominent, small and dense above, larger and laxer beneath; intramarginal glands absent. *Inflorescence* (1–2)–3–c. 30-flowered, cymose and regularly dichasial to monochasial or wholly monochasial, or with branches in uppermost leaf axil, or mixed, sometimes with subsidiary inflorescences from upper 1–3 leaf pairs, lax; pedicels usually exceeding uppermost leaves, 2–30 mm in fruit. *Flowers* (5–)6–12(–15) mm ø, plane; buds ellipsoid, subacute. *Sepals* 2.8–7.5(–9) by 0.8–2 mm, free, imbricate, lanceolate to narrowly elliptic, entire, acute to subacute, 3–5-nerved, often with ± prominent midrib, especially in fruit; laminar glands pale, linear towards the base, becoming punctate distally; marginal glands absent. *Petals* pale or bright yellow or orange, 5–10 by 2–5 mm, c. 1.3 times as long as the sepals, obovate to oblanceolate, entire, persistent; apiculus small, mucronate to rounded, lateral; laminar and marginal glands absent. *Stamens* not in apparent fascicles, c. 30–50, longest 2¼–4 mm, c. ¾ as long as petals; anthers yellow, gland amber. *Ovary* 1¼–2.3 mm, narrowly ovoid-conic; styles 3, 0.7–1.8 mm, ¼–½ as long as ovary, ± divergent; stigmas capitate; placentas 3, parietal. *Capsule* 2¼–8 by 1–3¼(–4) mm, narrowly ovoid to cylindric, not vitate. *Seeds* yellow-brown, ¼ mm, cylindric, not carinate, longitudinally ribbed with fine transverse striae.

*Distr.* Vietnam, Taiwan, China (Yunnan), India (Assam), Bhutan (?), in *Malesia*: New Guinea (Morobe, E., W. & S. Highlands, Western Distr.), Australia, New Zealand, New Caledonia.

*Ecol.* Grows in wet to dry, but open and well-drained habitats at 10–2600 m.

*Note.* *H. gramineum* appears to remain quite distinct from *H. japonicum* except in Bhutan, where hybrid (?) intermediates occur. It can be distinguished from *H. japonicum* by its larger flowers and floral parts, longer petals relative to sepals, more numerous stamens and, usually, its narrower leaves and lanceolate to narrowly elliptic acute sepals. In *H. japonicum* the sepals rarely show this combination of characters. In addition, *H.*

*gramineum* never has the straggling to prostrate habit often found in *H. japonicum*.

**15. *Hypericum japonicum* THUNB. ex MURRAY**, Syst. Veg. ed. 14 (July 1784) 702; THUNB. Fl. Jap. (Aug. 1784) 295, t. 31; LAMK. Encycl. Méth. 4 (1797) 163; CHOISY, Prod. Monogr. Hypér. (1821) 48; in DC. Prod. 1 (1824) 548, *incl. var. ramosum* CHOISY, l.c. 549; BL. Bijdr. 1 (1825) 143; D. DON, Prod. Fl. Nepal. (1825) 219; ROYLE, Ill. Bot. Himal. (1834) 131, t. 24, f. 2; HOOK. f. Fl. Nov. Zel. 1 (1853) 37, *incl. var. humifusum* (LABILL.) HOOK. f.; CHOISY in Zoll. Syst. Verz. (1854) 151; MIQ. Ann. Mus. Bot. Lugd.-Bat. 2 (1866) 259, *incl. f. microphylla* MIQ. *et f. tenuior* MIQ.; Prol. Fl. Jap. (1866) 147; DYER, Fl. Br. Ind. 1 (1874) 256; KURZ, J. As. Soc. Beng. 43, ii (1874) 84; FRANCH. & SAV. En. Pl. Jap. 2 (1878) 300; FORB. & HEMSL. J. Linn. Soc. Bot. 23 (1886) 73; TRIM. Fl. Ceylon 1 (1893) 93; R. KELLER, Bull. Herb. Boiss. 5 (1897) 641; BAILEY, Queensl. Fl. 1 (1899) 101; LÉV. Bull. Soc. Bot. Fr. 53 (1906) 501; *ibid.* 54 (1908) 593; GAGNEP. Fl. Gén. I.-C. 1 (1908) 286, f. 28, 15–21; R. KELLER, Bull. Herb. Boiss. II, 8 (1908) 185, 186, *incl. var. maximowiczii* R. KELLER, *var. thumbergii* (FRANCH. & SAV.) R. KELLER, *var. calyculatum* R. KELLER *et var. simplicius* R. KELLER; PAMPANINI, Nuov. Giorn. Bot. Ital. n.s. 17 (1910) 670, *incl. var. accumens* (BL.) PAMP.; LÉV. in Fedde, Rep. 8 (1910) 451, *incl. var. plurinervium* LÉV.; RIDL. J. Str. Br. R. As. Soc. 54 (1910) 16; BACK. Schoolfl. Java (1911) 86; HAYATA, Ic. Pl. Formos. 1 (1911) 78; GAMBLE, Fl. Pres. Madras 1 (1915) 70; RIDL. Trans. Linn. Soc. Lond. II, Bot. 9 (1916) 20; Fl. Mal. Pen. 1 (1922) 152; LAUT. Bot. Jahrb. 58 (1922) 5; BAKER f. J. Bot. 62 (1924) Suppl. 7; CRAIB, Fl. Siam. En. 1 (1925) 111; R. KELLER in E. & P. Nat. Pfl. Fam. ed. 2, 21 (1925) 181; MAKINO, Syokubutu Zukan (1925) 553, t. 628, *cum f. yabei* (LÉV. & VAN.) MAKINO; HOCHR. Candollea 2 (1925) 436, 437, *incl. var. typicum* HOCHR.; KOIDZ. Bot. Mag. Tokyo 40 (1926) 344, *incl. var. robusta* MIQ. ex KOIDZ. l.c. 435; RIDL. Kew Bull. (1926) 59; HEND. Gard. Bull. S. S. 4 (1928) 222; KOIDZ. Fl. Symb. Or. As. (1930) 92, *incl. var. cavaleriei* (LÉV.) KOIDZ.; HAND.-MAZZ. Symb. Sin. 7 (1931) 404; FYSON, Fl. S. India Hill Stat. 1 (1932) 49, *incl. var. major* FYSON; BURK. Dict. (1935) 1217; KANJILAL & DAS, Fl. Assam 1, 1 (1935) 102; Y. KIMURA, Bot. Mag. Tokyo 54 (1940) 87; CORNER, Wayside Trees (1940) 324; GAGNEP. Fl. Gén. I.-C. Suppl. 1 (1943) 250; MASAMUNE, Trans. Nat. Hist. Soc. Formosa 33 (1943) 168, *incl. var. kainantense* MASAM.; BANERJI, J. Bomb. Nat. Hist. Soc. 51 (1953) 774; HEND. Malayan Wild Fl. (1954) 34, f. 24; HUNDLEY & KO KO, List trees *etc.* Burma ed. 3 (1961) 19; BACK. & BAKH. f. Fl. Java 1 (1963) 382; OHWI, Fl. Jap. (Engl. transl.) (1965) 631; BANERJI, Rec. Bot. Surv. Ind. 19 (1966) 27; SHRESTHA, Bull. Dep. Med. Pl. Nepal 1 (1967) 7; STEEN. Mt Fl. Java (1972) t. 23: 7. — *Ascyrum humifusum* LABILL. Nov. Holl. Pl. Sp. 2 (1806) 33, t. 175. — *H. pusillum* CHOISY, Prod. Monogr. Hypér. (1821) 50; in DC. Prod. 1 (1824) 549. — *H. campestre* MOON, Cat. Ind. Exot. Pl. Ceylon (1824) 56, *nomen.* — *H. dichotomum* BUCH.-HAM. ex D. DON, Prod. Fl. Nepal. (1825) 219 in *synon.* — *Brathys humifusa* (LABILL.) SPACH, Ann. Sc. Nat. II, 5 (1836) 367. — *Tridlia*

*frankenoides* KORTH, Tijds. Nat. Gesch. Phys. 3 (1836) 17, t. 1. — *Brathys japonica* (THUNB. ex MURRAY) WIGHT, Ill. Ind. Bot. 1 (1840) 113; BL. Mus. Bot. Lugd. Bat. 2 (1856) 19, incl. var. *accumbens* BL.; MIQ. Fl. Ind. Bat. 1, 2 (1859) 513, 514, incl. var. *mucronisepala* MIQ. et var. *acutisepala* MIQ. — *H. nervatum* HANCE in Walp. Ann. 2 (1851) 188. — *H. sumatranum* MIQ. Pl. Jungh. (1855) 395. — *Brathys laxa* BL. Mus. Bot. Lugd. Bat. 2 (1856) 19. — *Brathys nepalensis* BL. l.c. — *Brathys debilis* BL. l.c. 20. — *Brathys radicans* BL. l.c. — *Brathys caespitosa* BL. l.c., incl. var. *pusilla* BL. — *Brathys oryzetum* BL. l.c. — *H. calycatum* JACQUEM. ex DYER, Fl. Br. Ind. 1 (1874) 256, in synon. — *H. thunbergii* FRANCH. & SAV. En. Pl. Jap. 2 (1878) 300; LÉV. Bull. Soc. Bot. Fr. 53 (1906) 498, 501. — *H. mutilum* (non L.) MAXIM. Mém. Biol. 11 (1882) 171; Bull. Ac. Sc. St. Pétersb. 27 (1882) 436; STAPF, Trans. Linn. Soc. Lond. II, Bot. 4 (1894) 132; GIBBS, J. Linn. Soc. Lond. 42 (1914) 59; Arfak (1917) 149; MERR. J. Mal. Br. R. As. Soc. 1 (1923) 53; STEEN. Bull. Gard. Bot. Btzg III, 13 (1934) 220. — *H. yabei* LÉV. & VANT. Bull. Soc. Bot. Fr. 53 (1906) 498, 501. — *H. taquetii* LÉV. & VAN. in Fedde, Rep. 5 (1908) 279. — *H. cavaleriei* LÉV. Bull. Soc. Bot. Fr. 54 (1908) 593. — *H. dominii* LÉV. l.c. — *H. pseudo-japonicum* NAKAI, Bot. Mag. Tokyo 27 (1913) 130, nomen. — *H. laxum* (BL.) KOIDZ. Bot. Mag. Tokyo 40 (1926) 344; MASAMUNE, Fl. & Geobot. Stud. Ins. Yakushima (1934) 305, incl. var. *hananoegoense* MASAM.; Y. KIMURA, Bot. Mag. Tokyo 51 (1937) 737; HATUSIMA, Bot. Mag. Tokyo 56 (1942) 571, incl. var. *novo-guineense* HATUS.; OHWI, Fl. Jap. (Engl. transl.) (1965) 630. — *Sarothra japonica* (THUNB. ex MURRAY) Y. KIMURA in Nakai & Honda, Nova Fl. Jap. 10 (1951) 235, t. 78, incl. f. *vulgaris* Y. KIMURA, l.c. 240, f. *microphylla* (MIQ.) Y. KIMURA, l.c., et f. *robusta* (MIQ. ex KOIDZ.) Y. KIMURA, l.c. — *Sarothra laxa* (BL.) Y. KIMURA in Nakai & Honda, Nova Fl. Jap. 10 (1951) 241, t. 79, incl. f. *repens* Y. KIMURA, l.c. 244, f. *simplex* Y. KIMURA, l.c., f. *ramosa* Y. KIMURA, l.c., f. *erecta* Y. KIMURA, l.c. 245, f. *hananoegoensis* (MASAM.) Y. KIMURA, l.c., et f. *ramosissima* Y. KIMURA, l.c.

Annual (?) or perennial herb, 2–45(–50) cm, with stems erect to decumbent or prostrate, unbranched below the inflorescence or also branched from the base or from various parts of the stem, with branches strict or ascending, rooting at the base, 4-lined. Leaves sessile, 2–18 by 1–10 mm, ovate to oblong or elliptic or subcircular or oblong-lanceolate or more rarely oblanceolate or obovate-spathulate, apex obtuse to rounded, base cordate-amplexicaul to cuneate or more rarely attenuate, sometimes glaucous beneath; 1–3 main basal veins, not or scarcely branched, often with 1 or more lateral veins; reticulate venation absent; laminar glands pale, not prominent, small, denser above than beneath; intramarginal glands absent. Inflorescence 1-c. 30-flowered, cymose and regularly dichasial to monochasial or with branches in uppermost leaf axils, sometimes with subsidiary inflorescences from the next leaf pairs or with branching becoming sympodial and flowers apparently axillary, lax; pedicels exceeding uppermost leaves or not, (1.4–)2–14 mm in fruit. Flowers 4–8 mm ø, plane; buds cylindric-ellipsoid, ± obtuse. Sepals 2–5½ by ½–2 mm, free, imbricate,

narrowly oblong or (rarely) lanceolate to elliptic or obovate, acute or obtuse to rounded, entire, sometimes shortly mucronate, 3–5-nerved, often with ± prominent midrib, especially in fruit; laminar glands pale, linear towards the base, becoming punctate distally; marginal glands absent. Petals pale or bright yellow to orange, 1.7–5 by 0.8–1.8 mm, c. 0.9–1.3 as long as the sepals, elliptic or oblong to obovate, entire, persistent; apiculus absent or vestigial, lateral; laminar and marginal glands absent. Stamens not in apparent fascicles but forming 5 irregular groups when few, 5–30, longest 1½–2.8 mm, ¾–½ as long as the petals; anthers yellow, gland amber. Ovary 1–1½(–1.8) mm, ± broadly ovoid to subglobose; styles (2–)3, 0.4–0.8(–1) mm, ¾–¾ as long as ovary, ± divergent, gradually broadening towards capitate stigmas; placentas (2–)3, parietal. Capsule (2–)2½–6 by 1.3–2.8 mm, cylindric to globose, not vittate. Seeds yellow-brown, c. ½ mm, cylindric, not carinate, longitudinally ribbed with fine transverse striae.

Distr. Japan, S. Korea and SE. China to Ceylon, Australia, New Zealand and Hawaii; throughout Malesia.

Ecol. Wet or marshy habitats (rice-fields, ditches, stream margins) to dry localities (short grassland, roadsides), but always in exposed places, 0–3400 m.

Notes. *H. japonicum* is an extremely variable species; but the variation appears to be continuous, so that, despite the long list of published segregate species or infraspecific taxa, it seems impossible to distinguish infraspecific categories. The following numbered variants, however, will give some idea of the nature of this variation:

- (1) Stems erect, simple. Leaves ± broadly ovate, subacute to obtuse, cordate-amplexicaul. Inflorescence terminal only, regularly dichasial at first. Bracts linear. Sepals oblong, acute. Petals as long as sepals. Stamens numerous (25–30). Capsule ± cylindric, shorter than sepals (Korea, China, Philippines).
- (2) As type 1, but with subsidiary inflorescences and branches, and often somewhat decumbent habit (S. Japan, Korea, China, India (Assam, Madras), Ceylon, Thailand, Malaya, Sumatra, Java, Celebes, Borneo, Philippines).
- (3) As type 1, but inflorescence branching wholly monochasial and stems always ± decumbent (Vietnam, Malaya, Sumatra, Java, Borneo, Philippines).
- (4) Differs from type 1 in having some or all the bracts foliar and the habit nearly always decumbent to prostrate, often with diffuse branching. This is found throughout the area of the species. The shape of all parts is very variable, but one characteristic form with obovate outer sepals (var. '*calyculatum*') occurs in the Himalaya. Another characteristic form—prostrate with radiating branches, small, obovate to circular leaves and obovate or broadly elliptic sepals—occurs in the western half of Java (Priangan Mts & Dieng).
- (5) The stem-branching in this decumbent to prostrate delicate diffuse variant is sympodial (resulting in pseudo-axillary flowers) and the sepals narrowly elliptic to narrowly oblong or oblanceolate (var. '*humifusum*'); the size of all

parts is small and the stamens few in number (5–10), and the subglobose capsules exceed the sepals (New Guinea, Tasmania, New Zealand).

*H. japonicum* has been confused with *H. mutilum* L., a species mainly of eastern North America that differs from *H. japonicum* in several characters, e.g. the branches are more widely spreading (40–70° from vertical rather than 20–40°), those of the inflorescence being more slender than the stem and main branches (not equally stout), whilst those at the uppermost pair of nodes are usually more or less congested and often subumbellate (not roughly equally spaced); also, the bracts and bracteoles are nearly always linear-subulate and about 1–1½ mm long (not broader and/or 2–7 mm long).

#### Dubious

*Hypericum chinense* OSBECK, Dagbok Ostind. Resa (1757) 244.

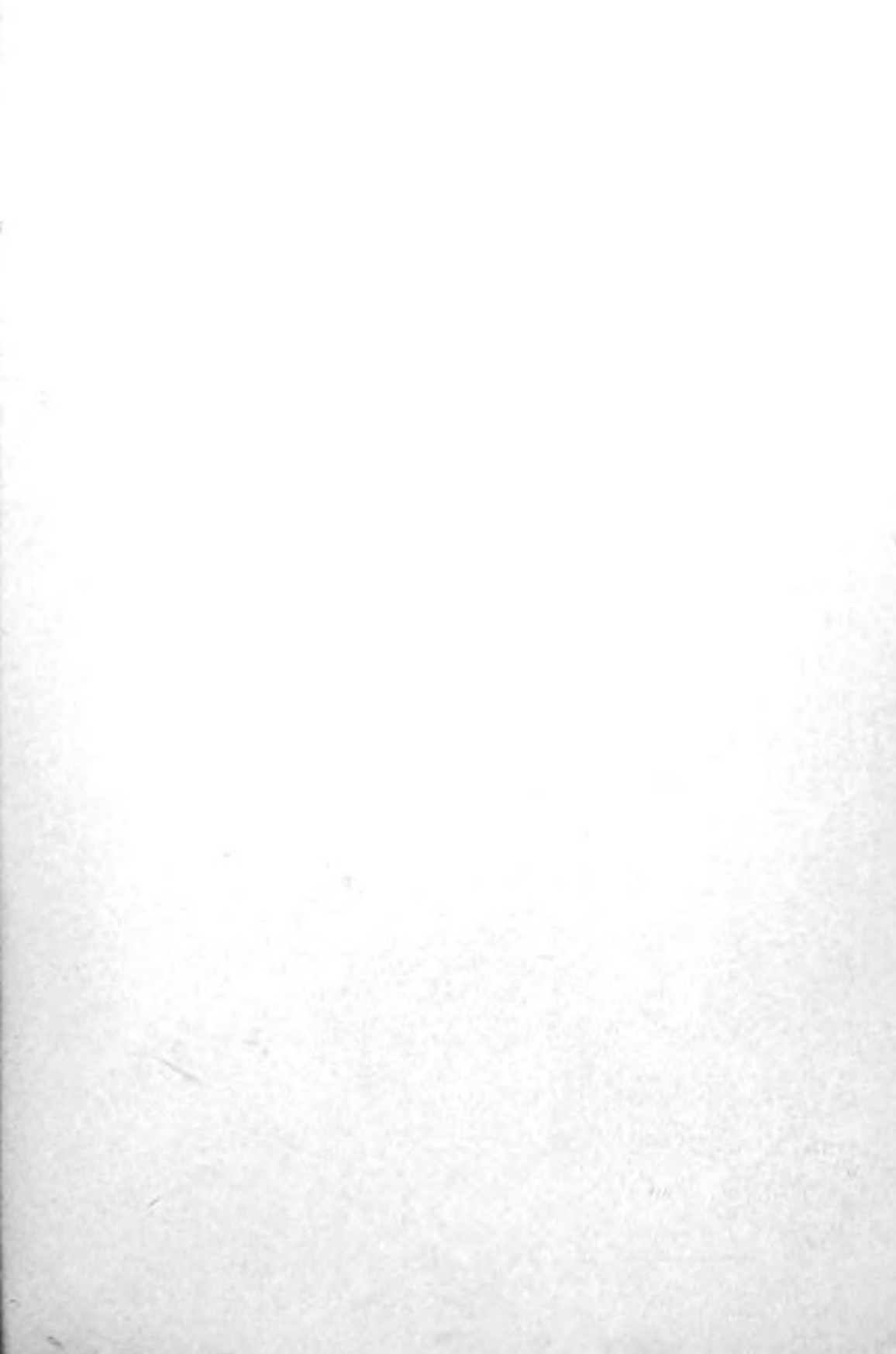
This name predates *H. chinense* L. (1759), as

MERRILL (Am. J. Bot. 3, 1916, 588) pointed out. MERRILL, however, thought that LINNAEUS and OSBECK had described the same species, whereas OSBECK's description is of a herb with quadrangular stems, and therefore his name cannot be applied to the Linnaean species. If *H. chinense* OSBECK is a *Hypericum*, as seems likely, then it is almost certainly an earlier name for *H. japonicum* THUNB. ex MURRAY. In the absence of a specimen, however, and in the interest of nomenclatural stability, it should be regarded as a *nomen dubium*.

*Hypericum consimile* R. KELLER, Bot. Jahrb. 33 (1904) 552.

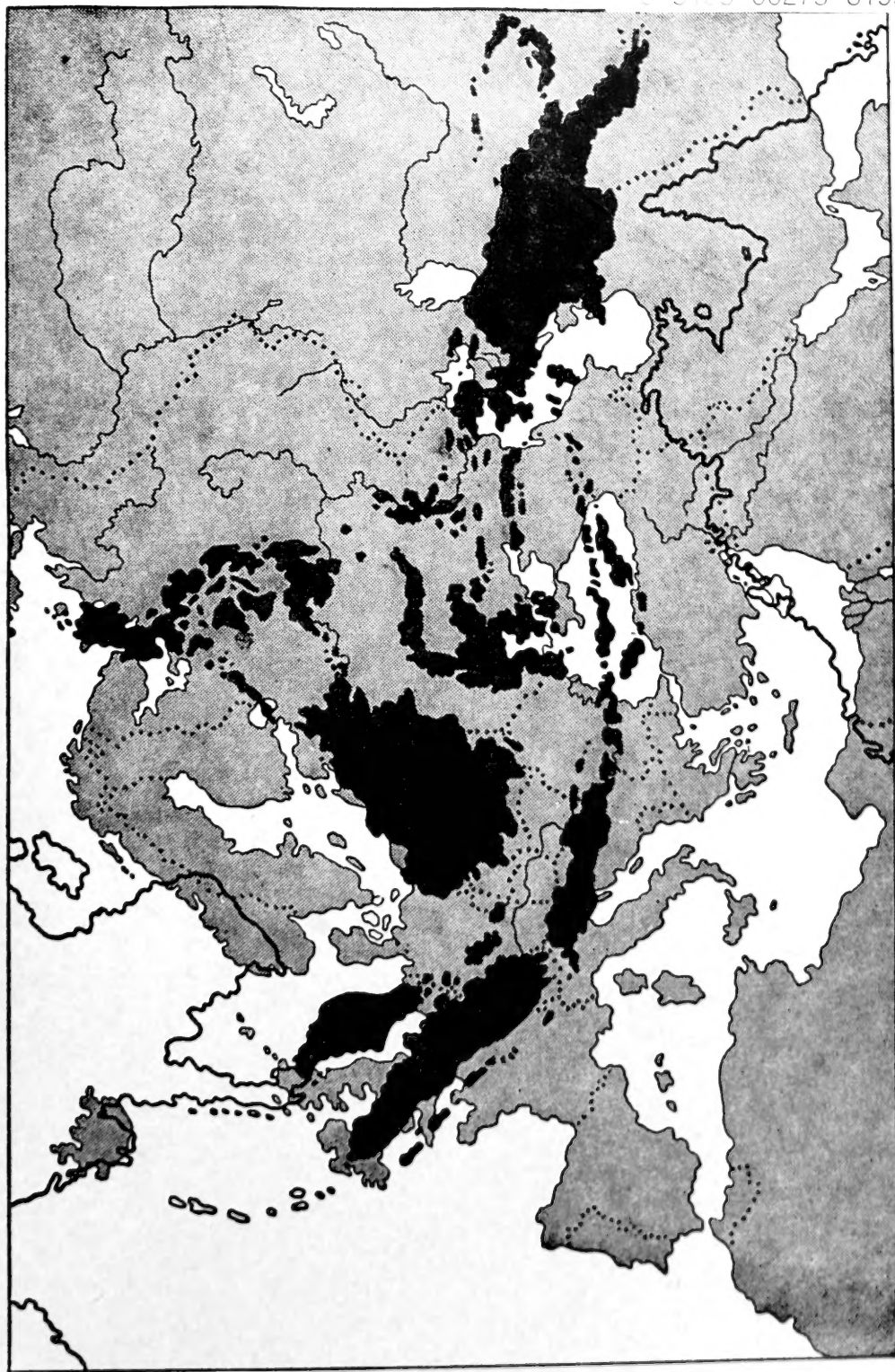
This species was described as coming from Java and belonging to *sect. Androsaemum* (DUN.) GODR., which is otherwise confined to Europe, W. Asia, N. Africa and Macaronesia. It is said to be close to *H. elatum* AIT. (i.e. *H. inodorum* MILL.), which is the hybrid *H. hircinum* L. × *H. androsaemum* L. The type specimen has not been located, but, if it does come from Java—and is correctly described—then it is almost certain to be an escape from cultivation.











# FLORA MALESIANA

under the Auspices of  
Lembaga Biologi Nasional (Botanic Gardens of  
Indonesia), Bogor, Indonesia,  
and the Rijksherbarium, Leyden, Holland,  
executed by Foundation Flora Malesiana

Scientific Communications  
concerning the Flora Malesiana should be addressed to  
the General Editor, Dr. C. G. G. J. VAN STEENIS

SUBSCRIPTION REQUESTS AND RELATED CORRESPONDENCE  
SHOULD BE DIRECTED EXCLUSIVELY TO  
NOORDHOFF INTERNATIONAL PUBLISHING  
P.O. Box 26, Leyden, The Netherlands

For sale only - Not for exchange

## Series I - Spermatophyta (Flowering Plants)

- Volume 1. Cyclopaedia of collectors & collections. 1950. pp. clii + 639
- Volume 2. Malesian vegetation (In preparation)
- Volume 3. Malesian plant geography (In preparation)
- Volume 4. General chapters and revisions. 1948-1954. pp. ccix + 631
- Volume 5. Bibliography, specific delimitation, & revisions. 1955-1958. pp. cccxlii + 596
- Volume 6. Systematic revisions. 6 parts. 1960-1972. pp. 20 + 1023.
- Volume 7. Systematic revisions. Parts 1-3. 1971-1974. pp. 753
- Volume 8. Cyclopaedia of Collectors, Suppl. 2. Systematic revisions. Part 1

NOORDHOFF INTERNATIONAL PUBLISHING, LEYDEN, THE NETHERLANDS

PRINTED IN NORTHERN IRELAND AT THE UNIVERSITIES PRESS, BELFAST

ISBN 90 286 0164 3  
LCCC No. 72-175112